SPATIALnet™

Release 2009 R1

SPATIALnet Configuration Manual

Contents

Welcome

About this manual

This manual is intended for use both as an introduction to SPATIAL*net* FM for beginners, and as a reference document for more advanced users. It contains detailed instructions for how to configure plant, equipment, and cable types in this configuration of SPATIAL*net*.

Who should use this manual?

This manual is intended for all users of SPATIAL*net* FM. Administrators and application developers should consult further documentation.

Prerequisite knowledge

A sound working knowledge of the Microsoft Windows© user interface is required (menus, toolbars, dialog boxes, mouse operations, etc.), as well as a good understanding of the AutoCAD application environment. Note that a high level of expertise in AutoCAD is not required to use SPATIAL*net* FM.

Related documentation

There are a number of other manuals that may be useful to you:

Document	Description
SPATIALnet FM User Manual	The ***User Manual*** is intended as a companion to the ***Configuration Manual***, and contains detailed descriptions of the commands available in this configuration of SPATIAL*net*.
SPATIALnet FM Tutorial	Introductory step-by-step tutorial introducing new users to SPATIALnet FM by performing many guided, hands-on exercises.
SPATIAL*net FM Installers Guide*	Instructions for installing SPATIALnet FM on a new workstation.
SPATIAL*net FM Administrator's Guide*	Describes key administrative functions, including database management, JMS administration, License Management and performance.

Table 1 - Related documentation

The AutoCAD online help documentation is a useful guide to the AutoCAD environment and its commands, and is accessible via the AutoCAD **Help** menu.

Conventions used in this manual

Below is a list of the typographical conventions used throughout the guide.

Convention	Meaning
Bold, Arial font	Menu name, keyboard key, dialog box name, field name, command name or icon.
>	Used to separate menu commands, for example: **SPATIALnet > View > Keymap**
Note:	Notes indicate information that emphasize or supplement information from the main text, as shown below. **Note:** This information may help in some situations, or contain hints and tips.
Important:	The information contained in the note is critical to completing a task.
… Details	The description of a generic dialog box in this manual will always include three full stops in the name of the dialog box. These full stops are used as a stand-in for an entity type. For example, the **…Details** dialog box can be interpreted as meaning the **Rack Details** dialog box, **Building Details** dialog box or the **…Details** dialog box of any other type of entity for which such a dialog box is capable of being displayed.
Italics	Indicates a reference to another section of the document, or to external documentation. Italics are also used when a new term is defined.
Hyperlink	Indicates a reference to a chapter or section within this document. There is an automatic cross-reference embedded to allow you to jump to a specifically referenced section when viewing this document as a PDF file or HTML page.

Table 2 - Conventions

Comments and suggestions

We welcome all comments on the software and documentation, and are very interested in suggestions, which would help us to enhance the SPATIAL*net* product and its usefulness to you. Please send your comments and suggestions to your distributor of SPATIAL*info* products.

Chapter 1

Configuring Outside Plant Site, Equipment and Cable Types

This chapter covers the following topics:

- How to manage specifications of equipment and site types, including defining new types of outside plant equipment.
- How to add additional database attributes to a class of equipment.

See Also: ***This chapter does not cover topics related to the management of individual fibers (fiber usage, splicing, tracing, etc.). See "Managing Usage and Splicing" in the SPATIALnet FM User Manual for sections covering these topics.***

See Also: ***This chapter does not cover topics related to managing plant item records, connectivity, etc. in the database. See"Managing Fiber Cables and Equipment" in the SPATIALnet FM User Manual for sections covering this topic.***

See Also: ***This chapter does not cover topics related to configuring inside plant equipment. See "Inside Plant" in the SPATIALnet FM User Manual for sections covering this topic.***

About site, equipment and cable types

SPATIAL*net* FM maintains tables, or "dictionaries" of site and equipment types. These dictionaries are necessary for managing the specification of plant and facility records. "Managing" an equipment and site type includes creating, editing, and deleting specifications for equipment types, as well as specifying their display symbology.

- Before an item of equipment or a site of a specific type can be entered into the SPATIAL*net* FM database, the specification of that type must first be defined. This is achieved by creating a new entry in the appropriate dictionary.

Creating a site type

To create a new site type in the site dictionary, use the **SPATIALnet > Dictionaries > Other Definitions** command to bring up the menu box, then highlight and click on **Site Definitions...**. This action displays the **Site Definitions** dialog box.

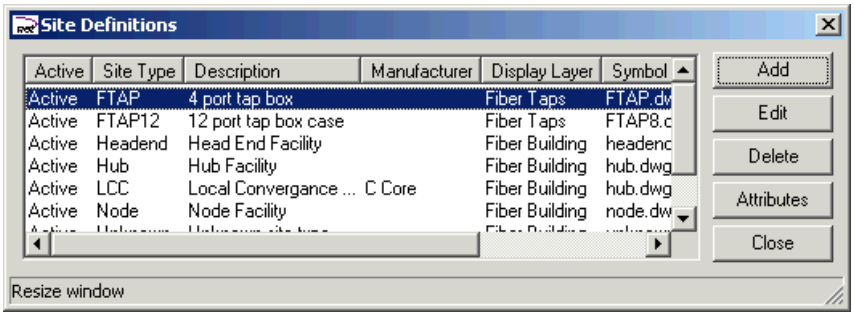


Figure 1 – Site Definitions dialog box

The **Site Definitions** dialog box contains the following fields:

Active:	If the site is "active" it means that the item can be selected when creating new instances of this site. If it is "inactive", new instances of this site *cannot* be created.
Site Type:	The type of site; e.g. headend, hub, pop, etc.
Description:	Text description of site type.
Manufacturer:	If site type describes equipment, the manufacturer may be recorded here, otherwise additional descriptive information may be entered instead.
Display Layer:	CAD layer in which the symbols representing sites of this type will be rendered.
Symbol Name:	Name of the CAD block that will be used to represent sites of this type. **Note: If this CAD block contains an attribute whose tag is called NAME the system will automatically populate this attribute with the value specified in the site's building name field.**
Symbol Scale:	The scaling factor to apply to the symbol representing sites of this type whenever it is rendered into a CAD view.
Cost:	Unit cost per item which is referenced in the Bill of Materials report.

To add a new site type, click the **Add** button. The **Add Site Definition** dialog box should now be displayed.

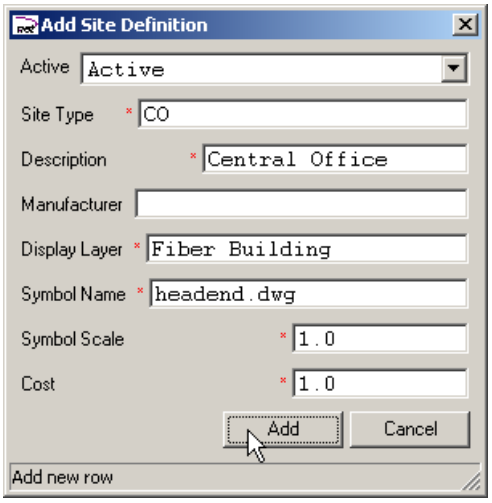


Figure 2 – Add Site Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new site type should then be visible in the **Site Definitions** dialog box.

Editing a site type

Once a site type has been created, it is possible to edit or modify the information in the fields connected with the site.

To edit a site type in the site dictionary, select the **SPATIALnet > Dictionaries > Other Definitions > Site Definitions...** menu. This action should display the **Site Definitions** dialog box. Highlight the site type to be edited, and click on the **Edit** button as shown below.

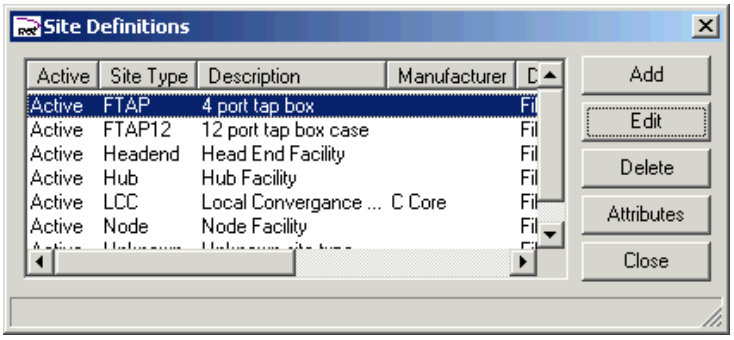


Figure 3 – Site Definitions dialog box

This will display the **Edit Site Definition** dialog box.

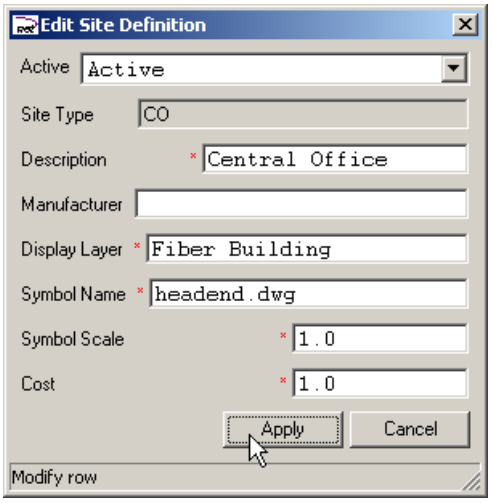


Figure 4 – Edit Site Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified site type should then be visible in the **Site Definitions** dialog box.

Note: As a "Site Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a site type

To delete a site type from the site dictionary, select the **SPATIALnet > Dictionaries > Other Definitions > Site Definitions...** menu. This action should display the **Site Definitions** dialog box. Highlight the site type you wish to delete, and click on the **Delete** button. The deleted site type should no longer be visible in the **Site Definitions** dialog box.

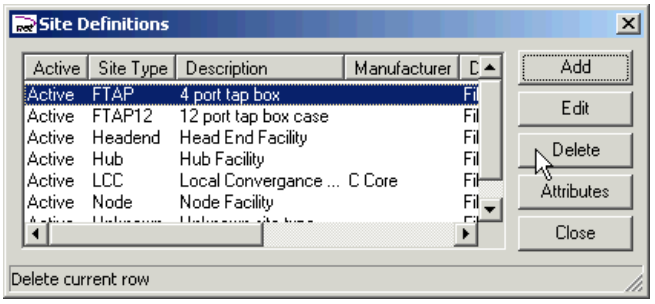


Figure 5 – Deleting a site type from the Site Definitions dialog box

Creating a miscellaneous type

To create a new miscellaneous type in the miscellaneous dictionary, use the **SPATIALnet > Dictionaries > Other Definitions** command to bring up the menu box, then highlight and click on **Misc. Definitions...**. This action displays the **Miscellaneous Definitions** dialog box.

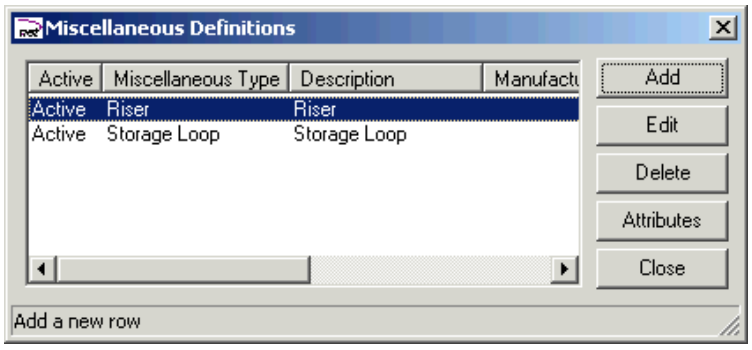


Figure 6 – Miscellaneous Definitions dialog box

The **Miscellaneous Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Miscellaneous Type:	This dictionary is for defining miscellaneous equipment that is not optically connected to the network; e.g., riser, snowshoe, etc.
Description:	Description of miscellaneous equipment.
Manufacturer:	Manufacturer of equipment, if applicable.
Display Layer:	CAD layer in which the symbols representing miscellaneous equipment of this type will be rendered.
Symbol Name:	Name of the CAD block which will be used to represent miscellaneous equipment of this type.
Symbol Scale:	The scaling factor to apply to the symbol representing miscellaneous equipment of this type whenever it is rendered into a CAD view.
Cost:	Unit cost per item which is referenced in the Bill of Materials report.

To add a new miscellaneous type, click the **Add** button. The **Add Miscellaneous Definition** dialog box should now be displayed.

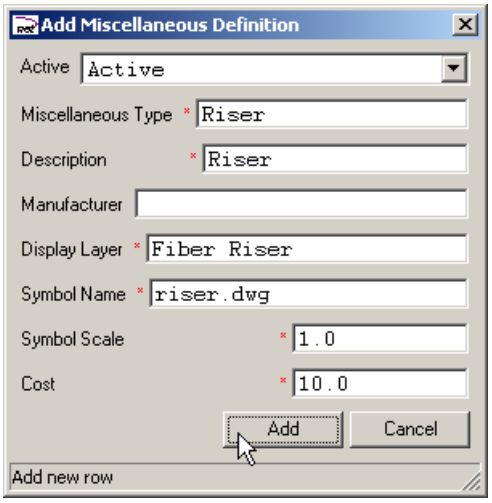


Figure 7 – Add Miscellaneous Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new miscellaneous type should then be visible in the **Miscellaneous Definitions** dialog box.

Editing a miscellaneous type

Once a miscellaneous type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a miscellaneous type in the miscellaneous type dictionary, select the **SPATIALnet > Dictionaries > Other Definitions > Misc. Definitions...** menu. This action should display the **Miscellaneous Definitions** dialog box. Highlight the miscellaneous type to be edited, and click on the **Edit** button, as shown below.

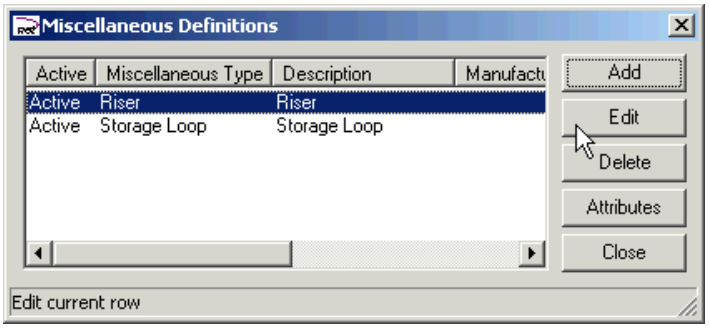


Figure 8 – Miscellaneous Definitions dialog box

This will display the **Edit Miscellaneous Definition** dialog box.

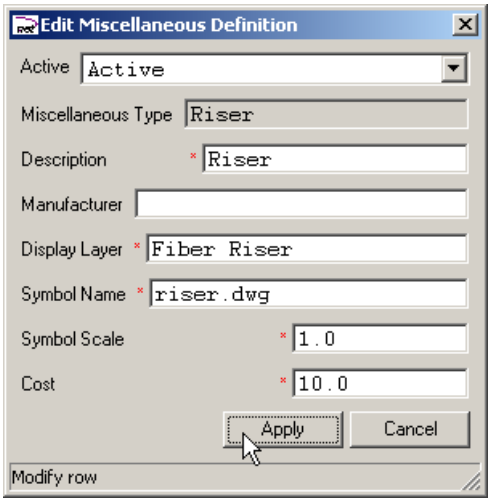


Figure 9 – Edit Miscellaneous Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified miscellaneous type should then be visible in the **Miscellaneous Definitions** dialog box.

Note: As a "Miscellaneous Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a miscellaneous type

To delete a miscellaneous type from the miscellaneous dictionary, select the **SPATIALnet > Dictionaries > Other Definitions > Misc. Definitions...** menu. This action should display the **Miscellaneous Definitions** dialog box. Highlight the miscellaneous type you wish to delete, and click on the **Delete** button. The deleted miscellaneous type should no longer be visible in the **Miscellaneous Definitions** dialog box.

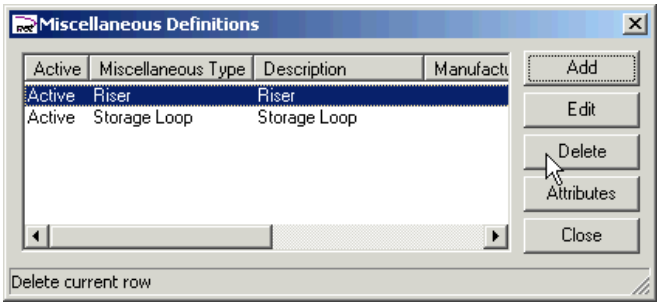


Figure 10 – Deleting a miscellaneous definition from the Miscellaneous Definitions dialog box

Creating a fiber cable type

To configure a fiber cable type, use the **SPATIALnet > Dictionaries > Fiber Definitions** command to bring up the menu box, then highlight and click on **Cable Definitions...**. This action displays the **Cable Definitions** dialog box.

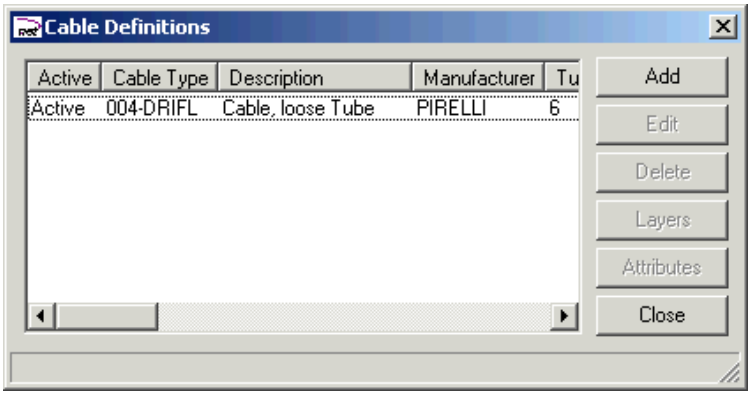


Figure 11 – Cable Definitions dialog box

The **Cable Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Cable Type:	Type of cable.
Description:	Description of cable**. Note: As this field is displayed when selecting the type of each cable, be sure to include enough descriptive information to allow you to identify each cable specification; e.g., number of fibers.**
Manufacturer:	Manufacturer of cable.
Tube Size:	Number of fibers in each buffer (tube).
Tube Count:	Number of tubes in the sheath.
Total Fibers:	The total fiber number should equal Type Size multiplied by Tube count. **Note: Although the total fiber number *should* equal the type size multiplied by the tube count, this requirement is not enforced by the software.**
Network Type:	Used to record the type of signal or carrier used by the device. If the ISP (Inside Plant) functions are being used, this field will be overridden to indicate the actual carriers used by the equipment (e.g. OC12, DS-1, etc.). If ISP is not being used, you may enter this type of information into this field.
Attenuation coefficient	dB loss per unit of measurement used in the maps for 1510nm wavelength.

for1510nm:	
Attenuation coefficient for 1550nm:	dB loss per unit of measurement used in the maps for 1550nm wavelength[1]
Attenuation coefficient for 1630nm:	dB loss per unit of measurement used in the maps for 1630nm wavelength.
Helix Factor:	A factor which compensates for the helical path of optical fibers through a cable sheath. This is used by the software to normalize the location of events in an OTDR trace. The number should be entered as a real number relative to 1; e.g.; if the helical path of a fiber is 5% longer than the length of the sheath in which it is contained, then the helix factor is 1.05. If no helix factor correction is required, the value 1.0 should be entered.
Auto create taps:	This field is a pull-down list with the following options: **Manually create taps** A splicable joint will not be created at each segment junction within the cable. This is the state normally used for cables not used in residential distribution **Auto Tap every segment at creation** A splicable joint will be created at each segment junction within the cable. This is the state normally used for cables used in residential distribution
Cost:	Unit cost per item which is referenced in the Bill of Materials report.
Splice Case Type:	The Splice Case Type which will be used whenever the system is required to create a Splice Case to terminate this cable type. For example, the system will automatically create a Splice Case to terminate a cable whose end-point is not connected to existing plant, but is placed in free space (see XXX). Select the chosen Splice Case Type from the drop down list. This contains all the Active Splice Case Types in the Splice Case Type dictionary (see XXX).

To add a new cable type, click the **Add** button. The **Add Cable Definition** dialog box should now be displayed.

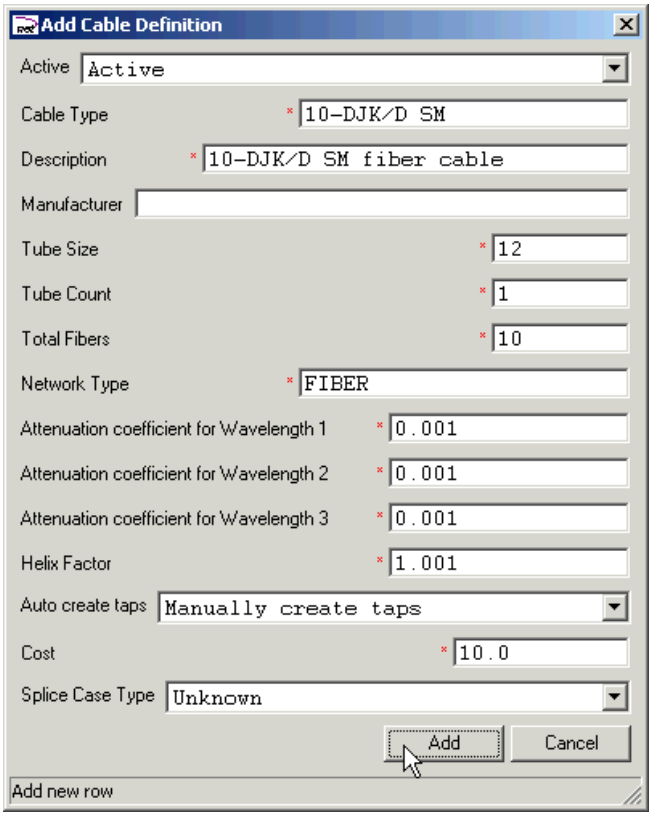


Figure 12 – Add Cable Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new cable type should then be visible in the **Cable Definitions** dialog box.

Editing a fiber cable type

Once a cable type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a cable type in the cable type dictionary, select the **SPATIALnet > Dictionaries > Fiber Definition** command to bring up the menu box, then highlight and click on **Cable Definitions...**. This action displays the **Cable Definitions** dialog box. Highlight the cable type to be edited, and click on the **Edit** button as shown below.

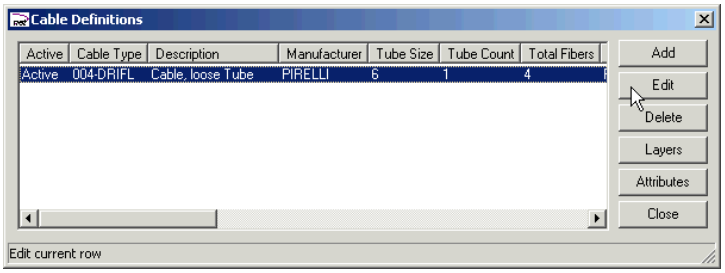


Figure 13 – Cable Definitions dialog box

This will display the **Edit Cable Definition** dialog box.

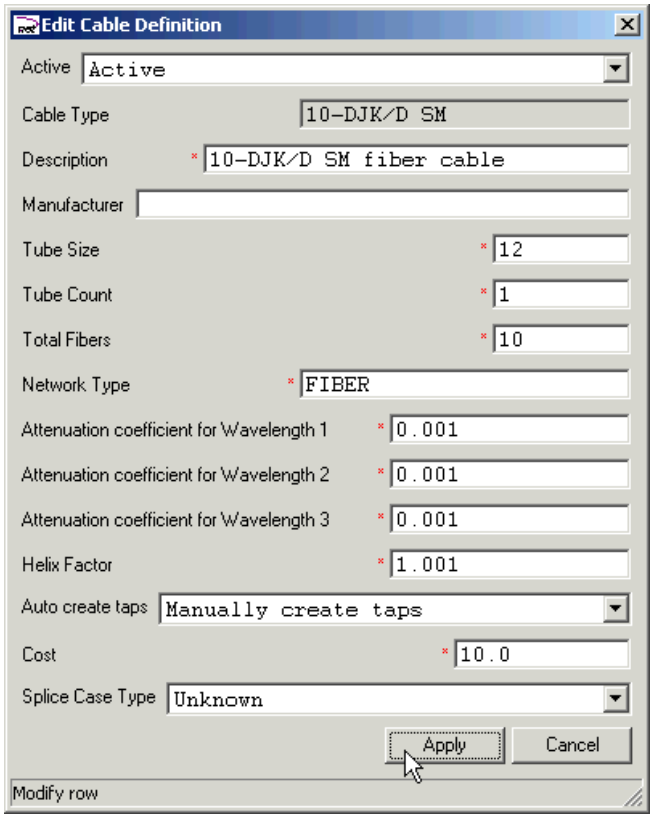


Figure 14 – Edit Cable Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified cable type should then be visible in the **Cable Definitions** dialog box.

Note: As a "Cable Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a fiber cable type

To delete a cable type from the cable dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Cable Definitions...** menu. This action should display the **Cable Definitions** dialog box. Highlight the cable type you wish to delete, and click on the **Delete** button. The deleted cable type should no longer be visible in the **Cable Definitions** dialog box.

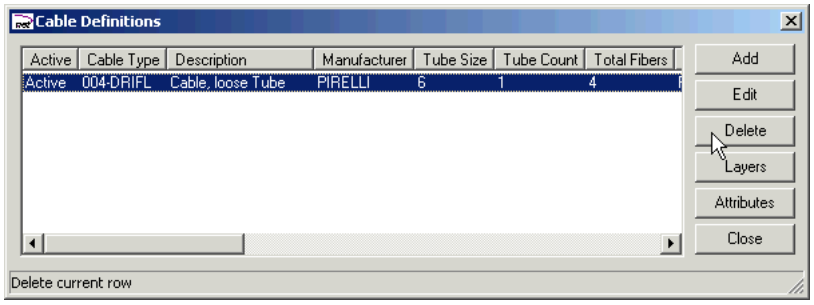


Figure 15 – Deleting a Cable type from the Cable Definitions dialog box

Creating a Cable Annotation type

To configure a term panel type, use the **SPATIALnet > Dictionaries > Other Definitions** command to bring up the menu box, then highlight and click on **Cable Annotation Definitions...**. This action displays the **Cable Annotation Definitions** dialog box.

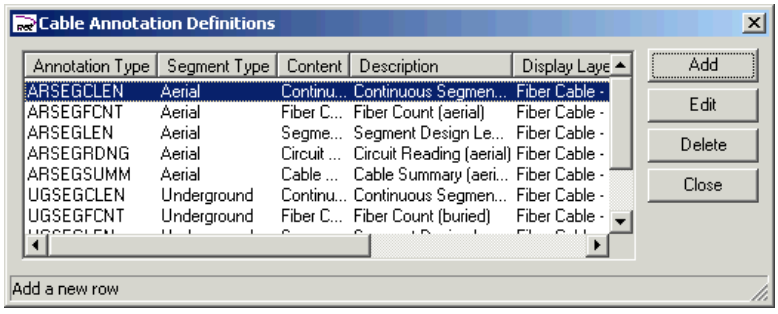


Figure 16 – Cable Annotation Definitions dialog box

The **Cable Annotation Definitions** dialog box contains the following fields:

Annotation Type:	The name you wish to give to this annotation type definition. This must be unique throughout the system.
Segment Type:	Defines the construction environment of the segment being annotated. Select one of the following values from the drop down list: **Aerial, Underground, Storage Loop, Pigtail, Other**.
Content:	Specifies the content (i.e. the text) that will be displayed in

	the annotation block. Choose one of the following options: **Count** These show the utilization of all pairs/fibers within a cable segment **Reading** These show the fibers in a cable segment grouped by common usage and common source. **Segment Design Summary** These represent the design length of the annotated cable segment **Continuous Segment Design Summary** These represent the design length of the annotated segment, but treat contiguous segments separated by storage loops as a single segment. **Cable Summary** These represent the length of the entire cable
Description:	Text description of this annotation type
Display Layer:	CAD layer on which annotation will be rendered
Remote Symbol:	Reference symbol to use when Remote annotation is created.
Symbol X Offset:	X-Offset to apply between the annotation and the primary symbol
Symbol Y Offset:	Y-Offset to apply between the annotation and the primary symbol

To add a Cable Annotation type, click the **Add** button. The **Add Cable Annotation Definition** dialog box should now be displayed.

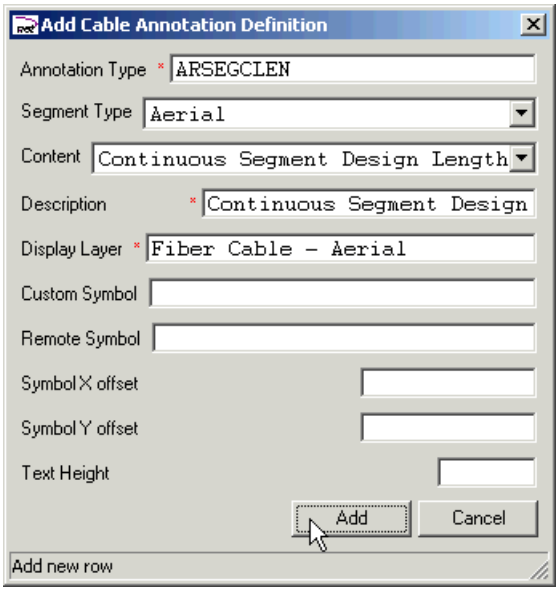


Figure 17 – Add Cable Annotation Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new cable annotation type should then be visible in the **Cable Annotation Definitions** dialog box.

Editing a cable annotation type

Once a cable annotation type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a cable annotation type in the cable annotation dictionary, select the **SPATIALnet > Dictionaries > Other Definitions > Cable Annotation Definitions...** menu. This action should display the **Cable Annotation Definitions** dialog box. Highlight the cable annotation type to be edited, and click on the **Edit** button as shown below.

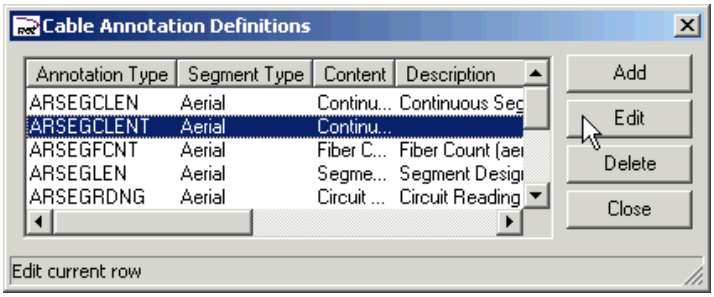


Figure 18 – Cable Annotation Definitions dialog box

This will display the **Edit Cable Annotation Definition** dialog box.

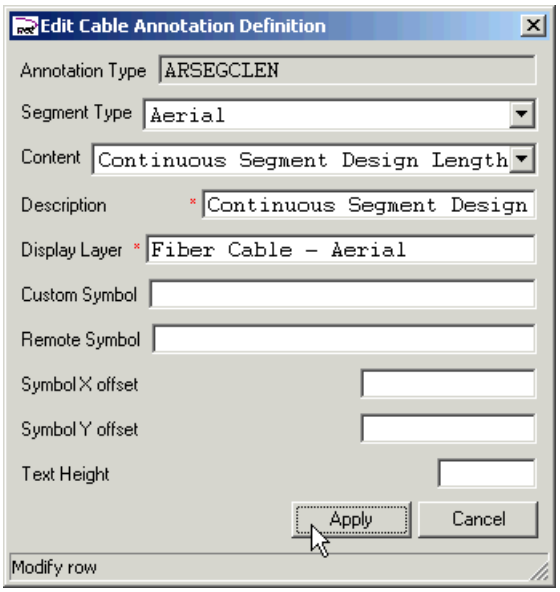


Figure 19 – Edit Cable Annotation Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified cable annotation type should then be visible in the **Cable Annotation Definitions** dialog box.

Note: As "Annotation Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a cable annotation type

To delete a cable annotation type from the cable annotation dictionary, select the **SPATIALnet > Dictionaries > Other Definitions > Cable Annotation Definitions...** menu. This action should display the **Cable Annotation Definitions** dialog box. Highlight the cable annotation type you wish to delete, and click on the **Delete** button. The deleted cable annotation type should no longer be visible in the **Cable Annotation Definitions** dialog box.

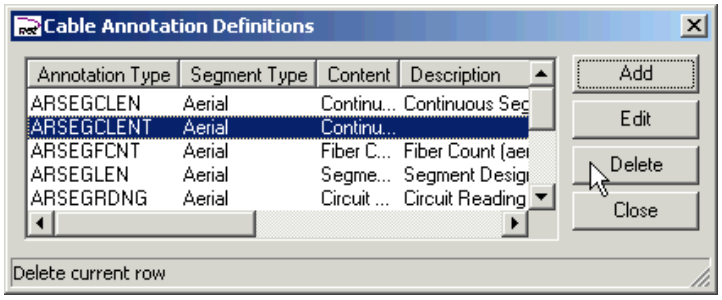


Figure 20 – Deleting a Cable Annotation type from the Cable Annotation Definitions dialog box

Creating a term panel type

To configure a term panel type, use the **SPATIALnet > Dictionaries > Fiber Definitions**, command to bring up the menu box, then highlight and click on **Term Panel Definitions...**. This action displays the **Term Panel Definitions** dialog box.

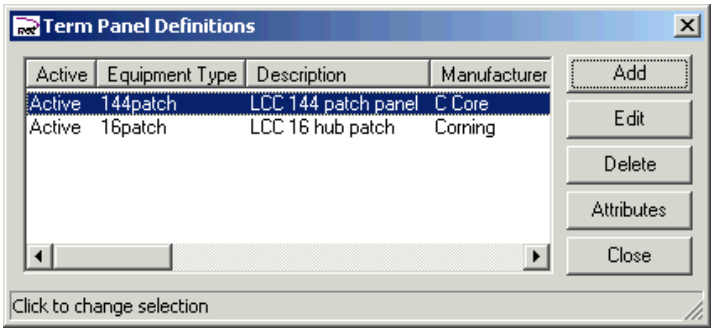


Figure 21 – Term Panel Definitions dialog box

The **Term Panel Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Equipment Type:	Type of term panel.
Description:	Description of term panel.
Manufacturer:	Manufacturer of term panel.
Maximum Ports:	Number of ports.
Default Port State Code:	The Usage Code that will automatically be applied to each port when a term panel is created (see *Creating a usage code definition* on page 43 for further details)
Network Type:	Used to record the type of signal or carrier used by the device. If the ISP (Inside Plant) functions are being used, this field will be overridden to indicate the actual carriers

	used by the equipment (e.g. OC12, DS-1, etc.). If ISP is not being used, you may enter this type of information into this field.
Estimated Loss at Wavelength 1:	Estimated loss for this wavelength.
Estimated Loss at Wavelength 2:	Estimated loss for this wavelength.
Estimated Loss at Wavelength 3:	Estimated loss for this wavelength.
Site Type:	The site type that will be automatically created to house the term panel if a term panel is created in free space.
Cost:	Unit cost per item which is referenced in the Bill of Materials report.
Default Shelf Code:	
Number of Shelves:	

To add a new term panel type, click the **Add** button. The **Add Term Panel Definition** dialog box should now be displayed.

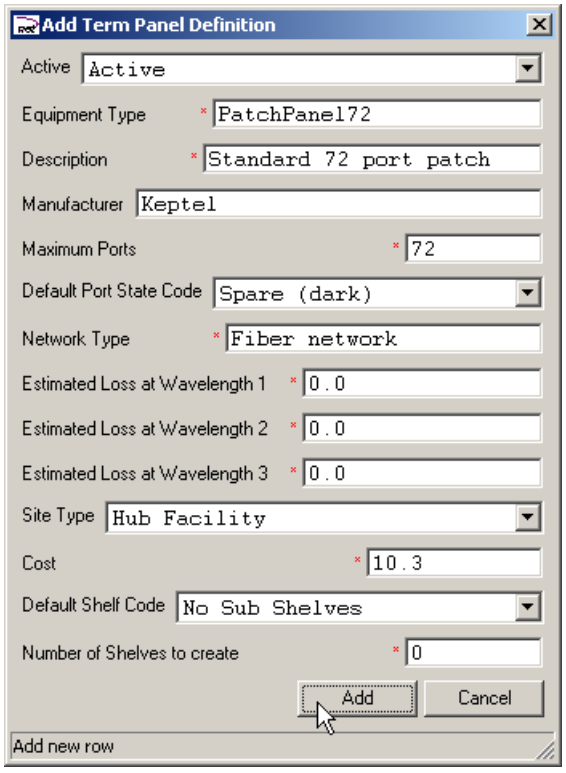


Figure 22 – Add Term Panel Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new term panel type should then be visible in the **Term Panel Definitions** dialog box.

Editing a term panel type

Once a term panel type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a term panel type in the term panel dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Term Panel Definitions...** menu. This action should display the **Term Panel Definitions** dialog box. Highlight the term panel to be edited, and click on the **Edit** button as shown below.

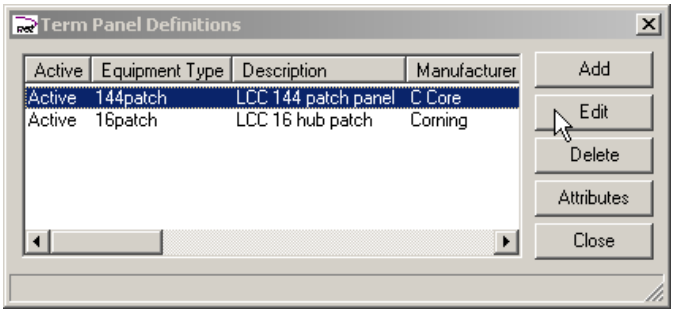


Figure 23 – Term Panel Definitions dialog box

This will display the **Edit Term Panel Definition** dialog box.

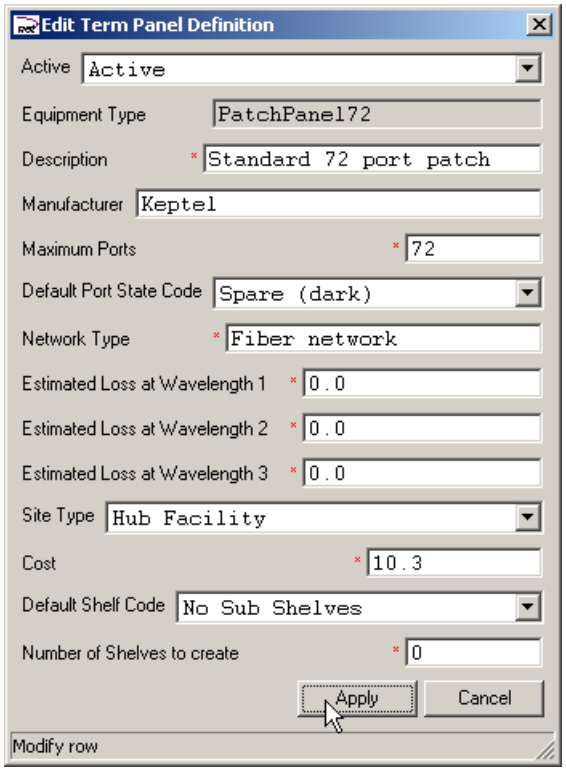


Figure 24 – Edit Term Panel Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified term panel type should then be visible in the **Term Panel Definitions** dialog box.

Note: As "Equipment Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a term panel type

To delete a term panel type from the term panel dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Term Panel Definitions...** menu. This action should display the **Term Panel Definitions** dialog box. Highlight the term panel type you wish to delete, and click on the **Delete** button. The deleted term panel type should no longer be visible in the **Term Panel Definitions** dialog box.

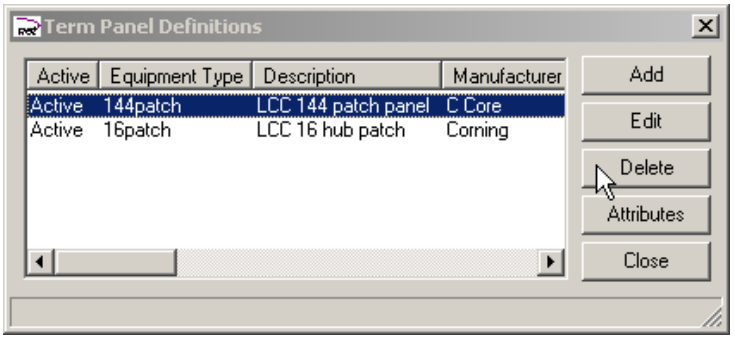


Figure 25 – Deleting a Term Panel type from the Term Panel Definitions dialog box

Creating a term panel shelf type

To configure a term panel shelf type, use the **SPATIALnet > Dictionaries > Fiber Definitions**, command to bring up the menu box, then highlight and click on **Term Panel Shelf Definitions**.... This action displays the **Termination Shelf Definitions** dialog box.

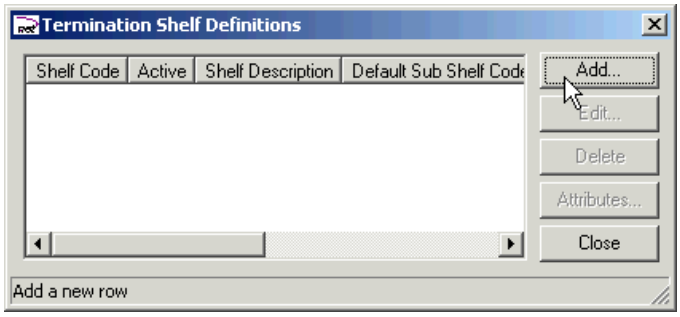


Figure 26 – Termination Shelf Definitions dialog box

The **Termination Shelf Definitions** dialog box contains the following fields:

Shelf Code:	
Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Shelf Description:	Type of Shelf.
Default Sub Shelf Code:	(Select from drop-down menu.)
Number of Sub Shelves to create:	
Number of Corrective Positions:	

To add a new term shelf definition, click the **Add** button. The **Add Term Panel Definition** dialog box should now be displayed.

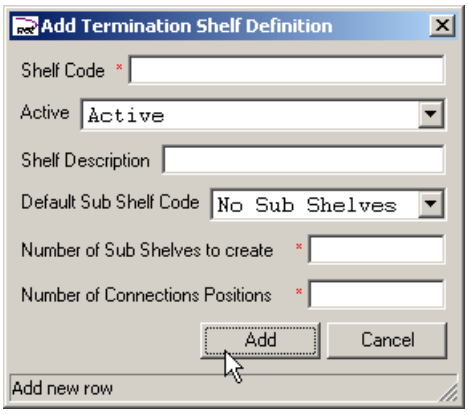


Figure 27 – Add Termination Shelf Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new term panel shelf type should then be visible in the **Termination Shelf Definitions** dialog box.

Editing a term panel shelf type

Once a term panel shelf type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a term panel type in the term panel dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Term Panel Shelf Definitions...** menu. This action should display the **Termination Shelf Definitions** dialog box. Highlight the term shelf panel to be edited, and click on the **Edit** button as shown below.

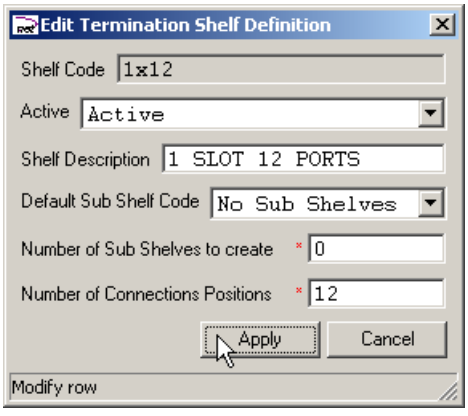


Figure 28 – Termination Shelf Definitions dialog box

This will display the **Edit Termination Shelf Definition** dialog box.

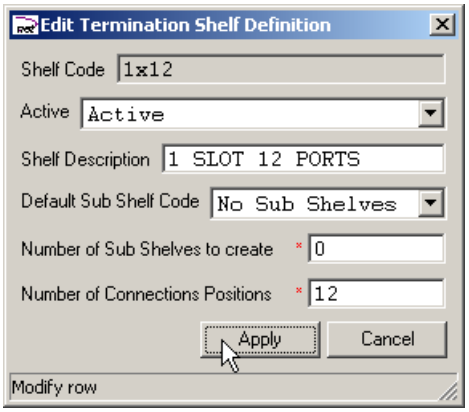


Figure 29 – Edit Termination Shelf Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified termination shelf type should then be visible in the **Termination Shelf Definitions** dialog box.

Note: As "Shelf Code" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a term shelf panel type

To delete a term shelf panel type from the term shelf panel dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Term Panel Shelf Definitions...** menu. This action should display the **Termination Shelf Definitions** dialog box. Highlight the term panel shelf type you wish to delete, and click on the **Delete** button. The deleted term panel type should no longer be visible in the **Termination Shelf Definitions** dialog box.

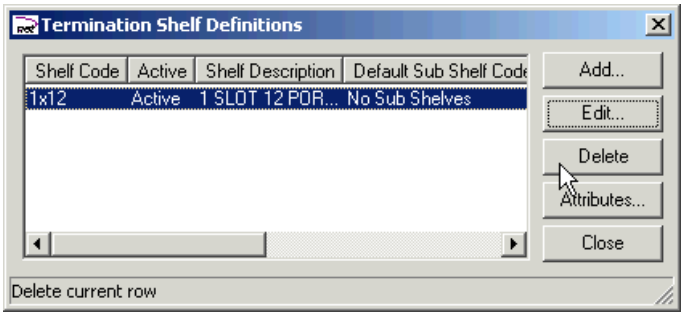


Figure 30 – Deleting a Term Panel Shelf type from the Termination Shelf Definitions dialog box

Creating a node type

To configure a node type, use the **SPATIALnet > Dictionaries > Fiber Definitions** command to bring up the menu box, then highlight and click on **Node Receiver Definitions....** This action displays the **Node Definitions** dialog box.

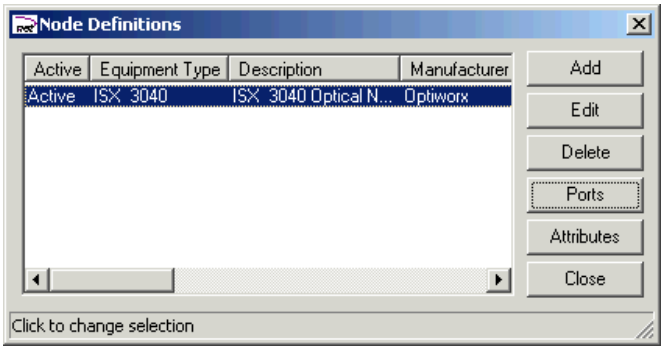


Figure 31 –Node Definitions dialog box

The **Node Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Equipment Type:	Type of equipment.
Description:	Detailed description of equipment type.
Manufacturer:	Manufacturer of equipment.
Total Ports:	Number of ports on the node. **Warning: You must add exactly this number of ports using the** Ports **button or the system will not be able to add nodes of this type.**
Network Type:	Used to record the type of signal or carrier used by the device. If the ISP (Inside Plant) functions are being used, this field will be overridden to indicate the actual carriers used by the equipment (e.g. OC12, DS-1, etc.). If ISP is not being used, you may enter this type of information into this field.
Estimated Loss at Wavelength 1:	Estimated loss for this wavelength.
Estimated Loss at Wavelength 2:	Estimated loss for this wavelength.
Estimated Loss at Wavelength3 :	Estimated loss for this wavelength.
Site Type:	The site type automatically created to house optical nodes of

	this type when a node of this type is placed on the map.
Cost:	Unit cost per item which is referenced in the Bill of Materials report.

To add a new node type, click the **Add** button. The **Add Node Definition** dialog box should now be displayed.

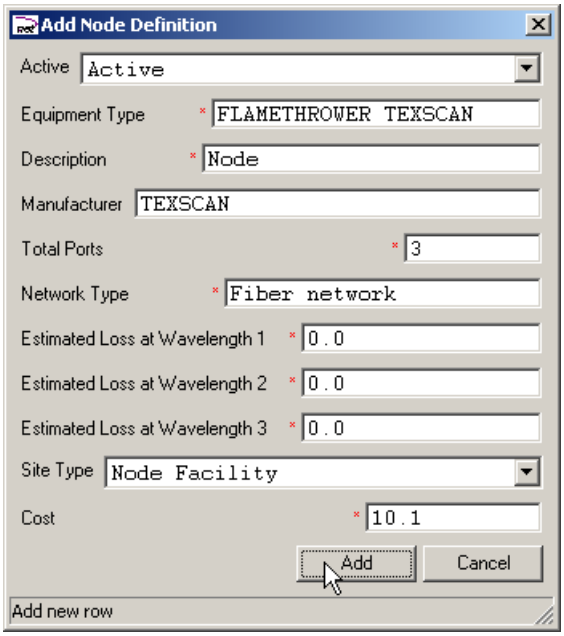


Figure 32 – Add Node Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new node type should then be visible in the **Node Definitions** dialog box.

Editing a node type

Once a node type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a node type in the node dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Node Receiver Definitions...** menu. This action should display the **Node Definitions** dialog box. Highlight the node type to be edited, and click on the **Edit** button as shown below.

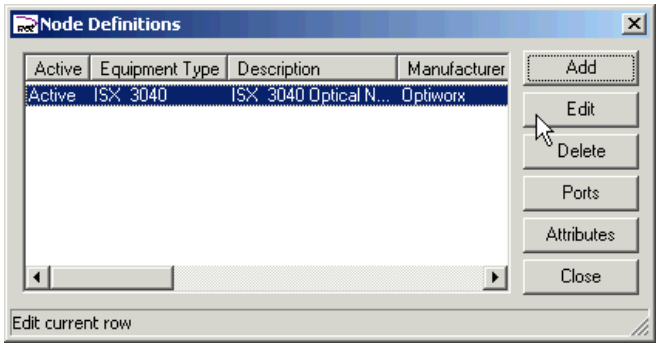


Figure 33 – Node Definitions dialog box

This will display the **Edit Node Definition** dialog box.

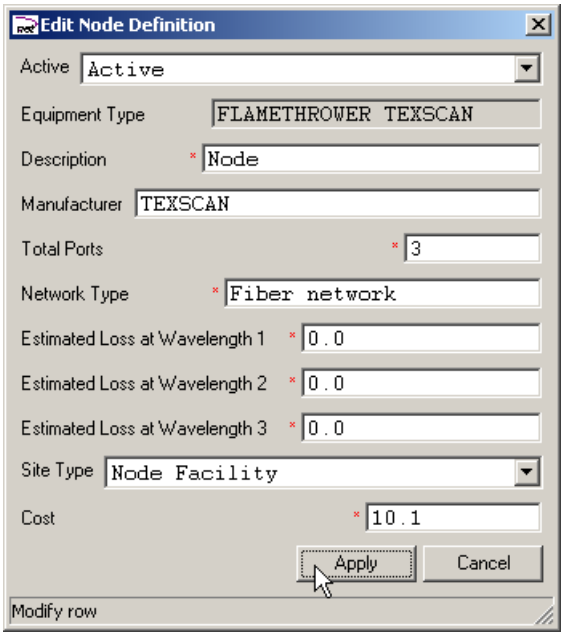


Figure 34 – Edit Node Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified node type should then be visible in the **Node Definitions** dialog box.

Note: As "Equipment Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a node type

To delete a node type from the node dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Node Receiver Definitions...** menu. This action should display the **Node Definitions** dialog box. Highlight the node type you wish to delete, and click on

the **Delete** button. The deleted node type should no longer be visible in the **Node Definitions** dialog box.

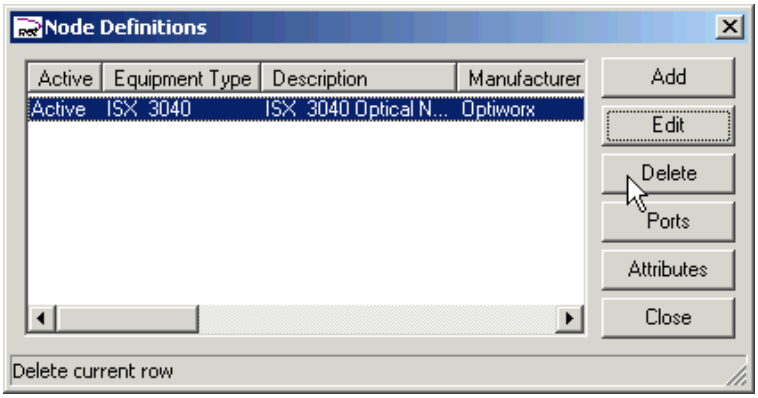


Figure 35 – Deleting a node type from the Node Definitions dialog box

Creating a tap box type

To configure a tap box type, use the **SPATIALnet > Dictionaries > Fiber Definitions** command to bring up the menu box, then highlight and click on **Tap Box Definitions...**. This action displays the **Tap Box Definitions** dialog box.

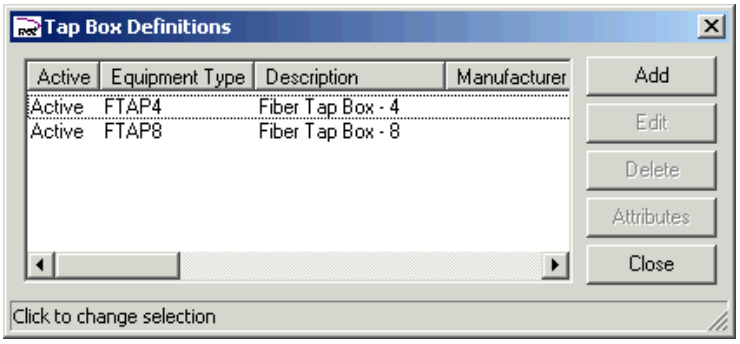


Figure 36 – Tap Box Definitions dialog box

The **Tap Box Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Equipment Type:	Type of tap box.
Description:	Description of tap box.
Manufacturer:	Manufacturer of tap box.
Total Ports:	Total number of ports.

Default Port State Code:	The Usage Code that will automatically be applied to each port when a tap box is created (see *Creating a usage code definition* on page 43 for further details)
Network Type:	Used to record the type of signal or carrier used by the device. If the ISP (Inside Plant) functions are being used, this field will be overridden to indicate the actual carriers used by the equipment (e.g. OC12, DS-1, etc.). If ISP is not being used, you may enter this type of information into this field.
Estimated Loss at Wavelength 1:	Estimated loss for this wavelength.
Estimated Loss at Wavelength 2:	Estimated loss for this wavelength.
Estimated Loss at Wavelength 3:	Estimated loss for this wavelength.
Site Type:	The site type that will be automatically created to house the tap box if a term panel is created in free space.
Cost:	Unit cost per item which is referenced in the Bill of Materials report.

To add a new tap box type, click the **Add** button. The **Add Tap Box Definition** dialog box should now be displayed.

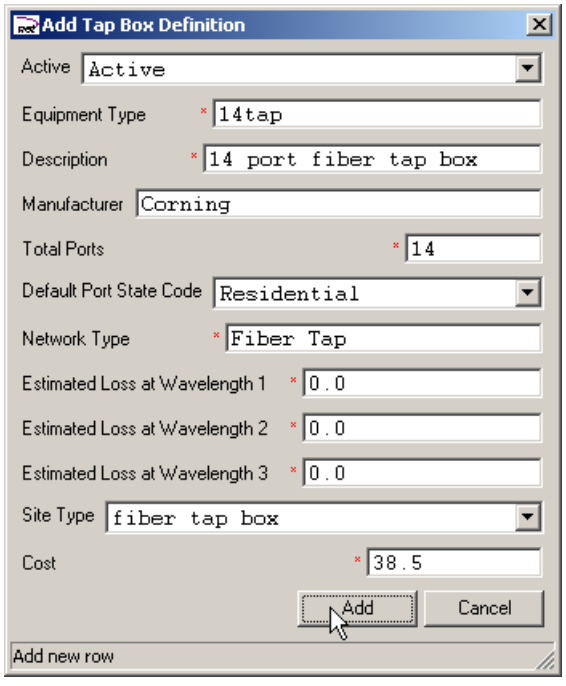


Figure 37 – Add Tap Box Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new tap box type should then be visible in the **Tap Box Definitions** dialog box.

Editing a tap box type

Once a tap box type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a tap box type in the term panel dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Tap Box Definitions...** menu. This action should display the **Tap Box Definitions** dialog box. Highlight the tap box type to be edited, and click on the **Edit** button as shown below.

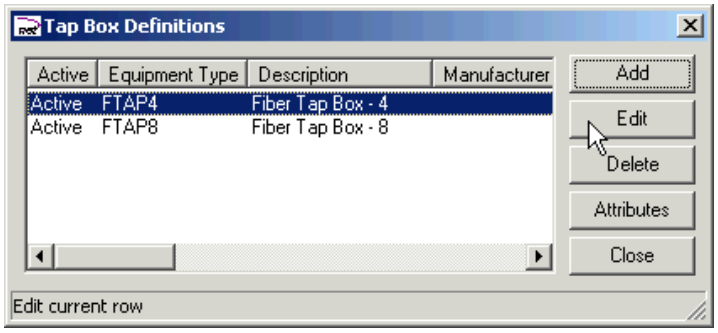


Figure 38 – Tap Box Definitions dialog box

This will display the **Edit Tap Box Definition** dialog box.

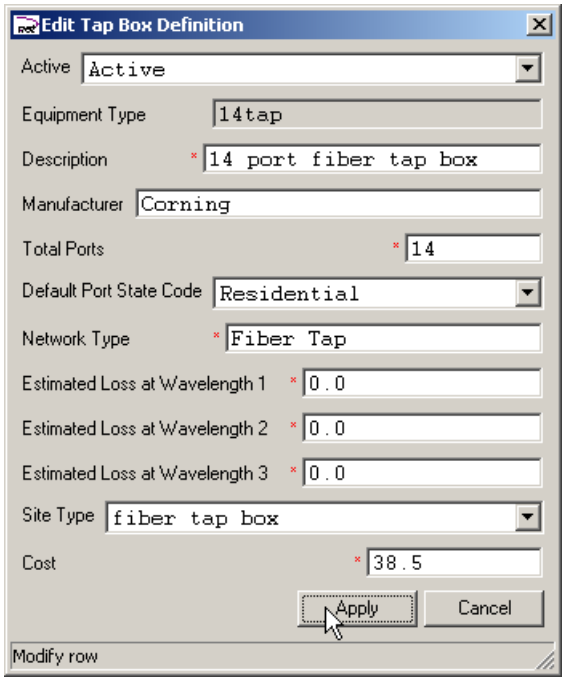


Figure 39 – Edit Tap Box Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified tap box type should then be visible in the **Tap Box Definitions** dialog box.

Note: As "Equipment Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a tap box type

To delete a tap box type from the tap box dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Tap Box Definitions...** menu. This action should display the **Tap Box Definitions** dialog box. Highlight the tap box type you wish to delete, and click on the **Delete** button. The deleted tap box type should no longer be visible in the **Tap Box Definitions** dialog box.

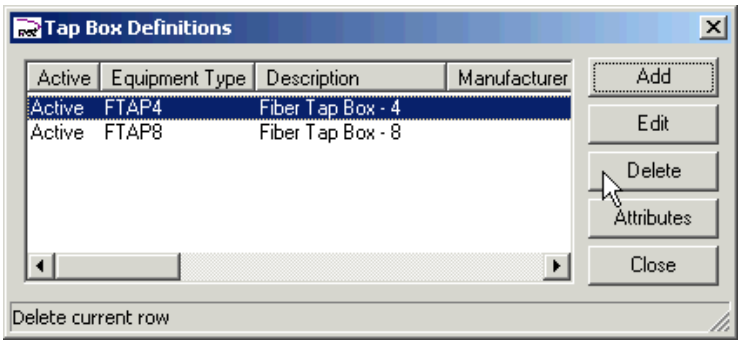


Figure 40 – Deleting a tap box type from the Tap Box Definitions dialog box

Creating a fiber splice case type

To configure a fiber splice case type, select the **SPATIALnet > Dictionaries > Fiber Definitions**, then highlight and click on **Splice Case Definitions**.... This action displays the **Spice Case Definitions** dialog box.

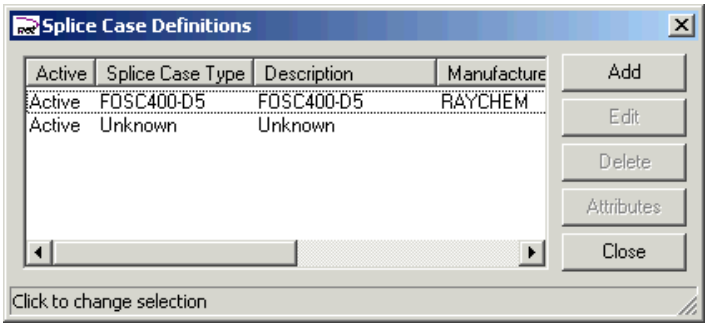


Figure 41 – Splice Case Definitions dialog box

The **Splice Case Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Splice Case Type:	Type of splice case.
Description:	Detailed description of splice case.
Manufacturer:	Manufacturer of splice case.
Display Layer:	CAD layer in which the symbols representing splice cases of this type will be rendered.
Symbol Name:	Name of the CAD block which will be used to represent splice cases of this type. **Note: If this CAD block contains an attribute whose tag is called NAME the system will automatically populate this attribute with the value specified in the splice case's name field.**
Use Cable End Symbols?	If this box is checked, then a separate copy of the splice symbol will be drawn at the end of each cable connected to a splice of this type. 
Symbol Scale:	The scaling factor to apply to the symbol representing splice cases of this type whenever it is rendered into a CAD view.
Cost:	Unit cost per item which is referenced in the Bill of Materials report.

To add a new fiber splice case type, click the **Add** button. The **Add Splice Case Definition** dialog box should now be displayed.

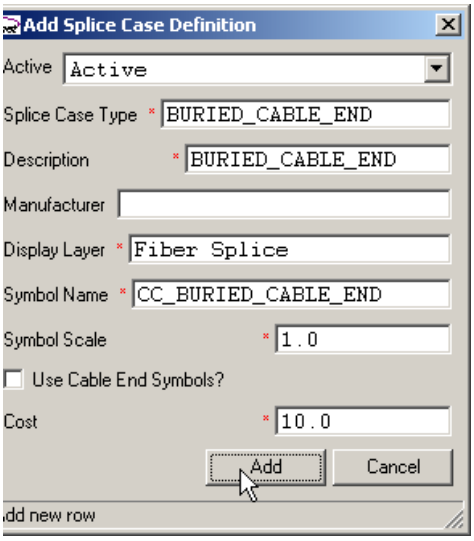


Figure 42 – Add Splice Case Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new splice case type should then be visible in the **Splice Case Definitions** dialog box.

Editing a fiber splice case type

Once a fiber splice case type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a fiber splice case type in the splice case dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Splice Case Definitions...** menu. This action should display the **Splice Case Definitions** dialog box. Highlight the splice case type to be edited, and click on the **Edit** button as shown below.

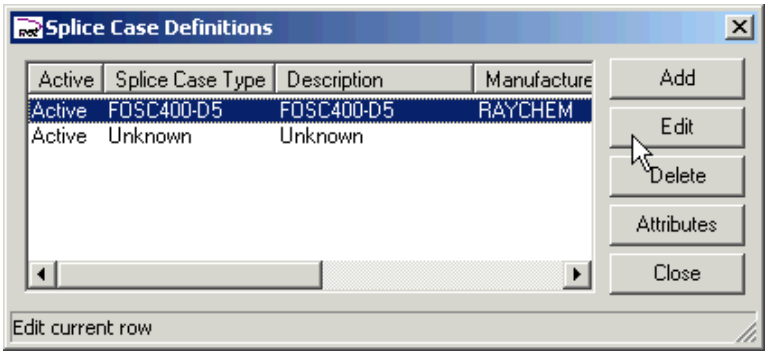


Figure 43 – Splice Case Definitions dialog box

This will display the **Edit Splice Case Definition** dialog box.

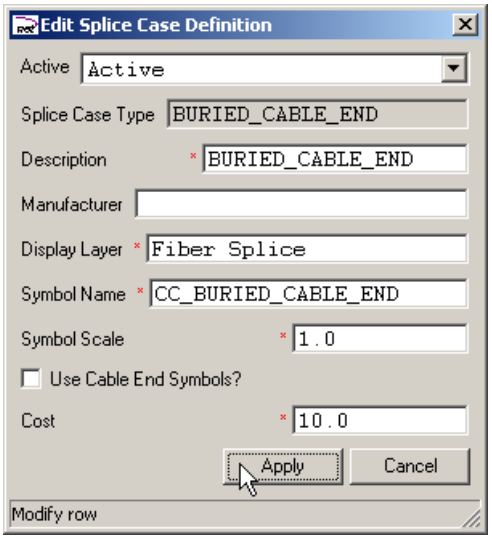


Figure 44 – Edit Splice Case Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified splice case type should then be visible in the **Splice Case Definitions** dialog box.

Note: As a "Splice Case Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a fiber splice case type

To delete a fiber splice case type from the splice case dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Splice Case Definitions...** menu. This action should display the **Splice Case Definitions** dialog box. Highlight the splice case type you wish to delete, and click on the **Delete** button. The deleted splice case type should no longer be visible in the **Splice Case Definitions** dialog box.

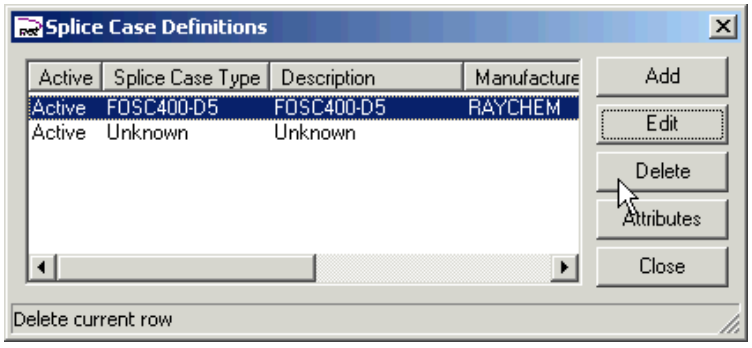


Figure 45 – Deleting a splice case type from the Splice Case Definitions dialog box

Creating a splice tray type

To configure a splice tray type, select the **SPATIALnet > Dictionaries > Fiber Definitions**, then highlight and click on **Splice Tray Definitions….** This action displays the **Splice Tray Definitions** dialog box.

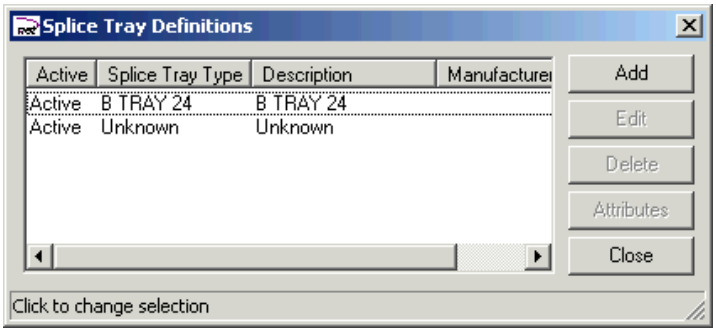


Figure 46 – Splice Tray Definitions dialog box

The **Splice Tray Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Splice Tray Type:	Type of splice tray.
Description:	Detailed description of splice tray type.
Manufacturer:	Manufacturer of splice tray.
Cost:	Unit cost per item which is referenced in the Bill of Materials report.

To add a new splice tray type, click the **Add** button. The **Add Splice Tray Definition** dialog box should now be displayed.

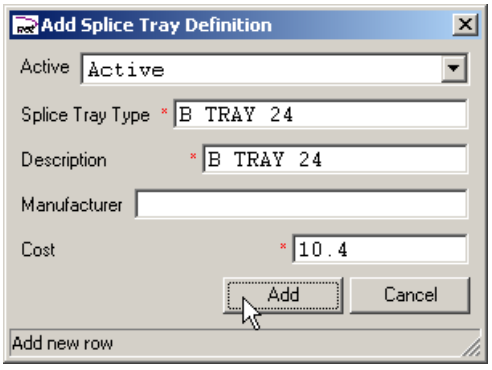


Figure 47 – Add Splice Tray Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new splice tray type should then be visible in the **Splice Tray Definitions** dialog box.

Editing a splice tray type

Once a splice tray type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a splice tray type in the splice tray dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Splice Tray Definitions...** menu. This action should display the **Splice Tray Definitions** dialog box. Highlight the splice tray type to be edited, and click on the **Edit** button as shown below.

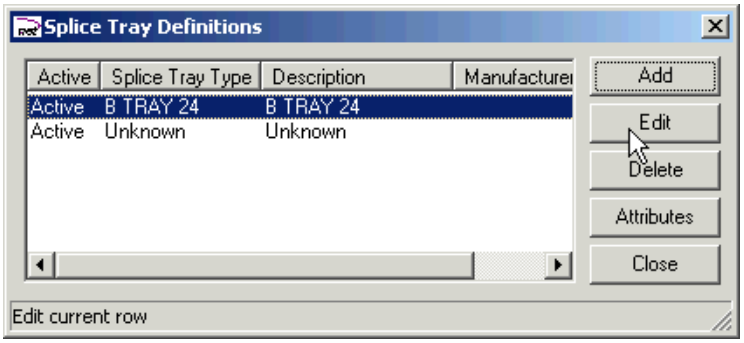


Figure 48 – Splice Tray Definitions dialog box

This will display the **Edit Splice Tray Definition** dialog box.

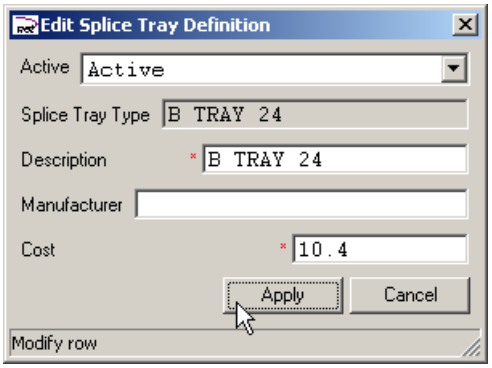


Figure 49 – Edit Splice Tray Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified splice tray type should then be visible in the **Splice Tray Definitions** dialog box.

Note: As "Splice Tray Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a splice tray type

To delete a splice tray type from the splice tray dictionary, select the **SPATIALnet > Dictionaries > Fiber Definitions > Splice Tray Definitions...** menu. This action should display the **Splice Tray Definitions** dialog box. Highlight the splice tray type you wish to delete, and click on the **Delete** button. The deleted splice tray type should no longer be visible in the **Splice Tray Definitions** dialog box.

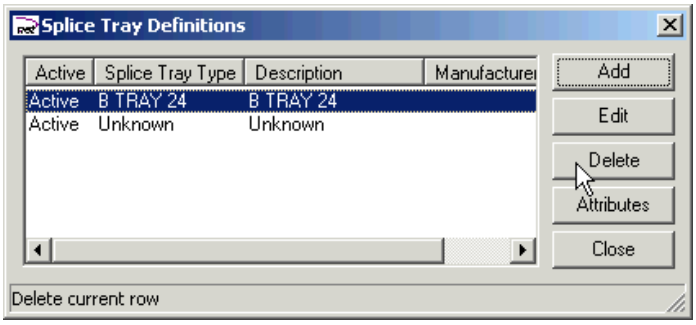


Figure 50 – Deleting a splice tray type from the Splice Tray Definitions dialog box

Creating a usage code definition

To create a usage code type definition, select the **SPATIALnet > Dictionaries > Other Definitions**, then highlight and click on **Usage Code Definitions....** This action displays the **Usage Code Definitions** dialog box.

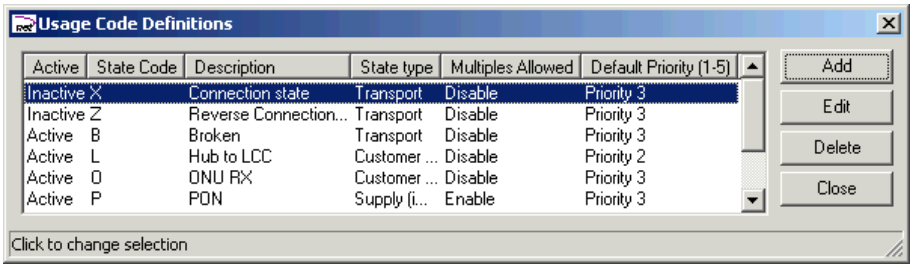


Figure 51 – Usage Code Definitions dialog box

The **Usage Code Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
State Code:	A single letter code which uniquely identifies the usage code. The single letter codes are also used in fiber annotation blocks to indicate the fiber usage states on the map. (see ***Error! Reference source not found.*** on page **Error! Bookmark not defined.**)
Description:	Short description of the Usage State. When a fiber or port is set to this Usage State, *Description* will be automatically assigned to the *Usage* property of all optically connected fibers and ports.
State type:	Indicates to the system whether a port assigned this state is a transmitter, a receiver, or is bi-directional. This is used by system logic when fibers are cut or spliced to indicate which end remains lit, and which becomes flagged as dark/Broken. The allowed values and their meanings are: **Value** **Value** **Meaning** **Action** **Customer** Port determines usage of fibers connected to it. When connectivity of a lit optical path is cut, the end still connected to the port is flagged as Broken, and the other end remains lit **Supply** Port determines origin of fibers connected to it. When connectivity of a lit optical path is cut, the end still connected to the port remains lit, while the other end is flagged as broken. **Transport** Bi-directional usage.

	When connectivity of a lit optical path is cut, both ends retain the usage state prior to the cut.
Multiples Allowed:	Specifies whether multiple fibers with this usage code may be spliced together at a single location. Select either **Disable** or **Enable** from drop down menu.
Default Priority:	Priority of the fiber, in terms of the importance of the services it is carrying. Select from drop down menu with values ranging from 1 (highest) to 5 (lowest).

Note:

The Usage Codes X, Z, B, and S must be present, as they are required for certain operations used by the system. They must never be removed. X and Z are only for use by the internal system logic and are usually not assigned directly to equipment.

To add a new User Code Definition, click the **Add** button. The **Add Usage Code Definition** dialog box should now be displayed.

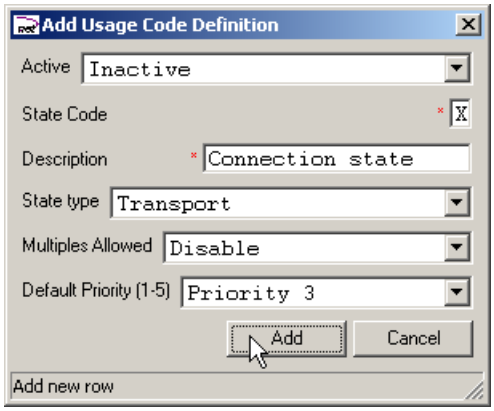


Figure 52 – Add Usage Code Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new usage code type should then be visible in the **Usage Code Definitions** dialog box.

Editing a usage code definition

Once a usage code type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a usage code type in the usage code definitions dictionary, select the **SPATIALnet > Dictionaries > Other Definitions > Usage Code Definitions...** menu. This

action should display the **Usage Code Definitions** dialog box. Highlight the usage code to be edited, and click on the **Edit** button as shown below.

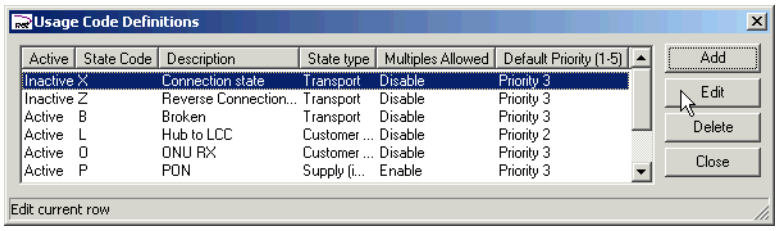


Figure 53 – Usage Code Definitions dialog box

This will display the **Edit Usage Code Definition** dialog box.

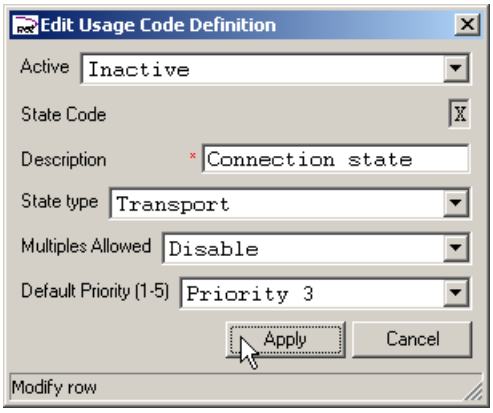


Figure 54 – Edit Usage Code Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified usage code type should then be visible in the **Usage Code Definitions** dialog box.

Note: As a "State Code" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a usage code definition

To delete a usage code type from the usage code dictionary, select the **SPATIALnet > Dictionaries > Other Definitions > Usage Code Definitions...** menu. This action should display the **Usage Code Definitions** dialog box. Highlight the usage code type you wish to delete, and click on the **Delete** button. The deleted usage code type should no longer be visible in the **Usage Code Definitions** dialog box.

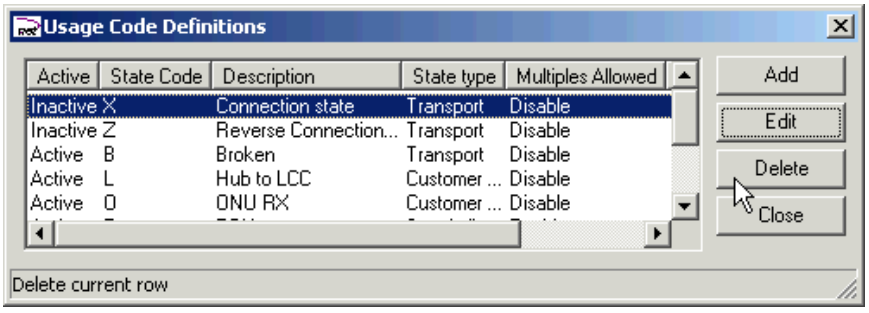


Figure 55 – Deleting a Usage Code type from the Usage Code Definitions dialog box

Addresses, Buildings and Unit Types

SPATIALnet supports a powerful addressing model specifically designed for supporting both outside plant network design, and the creation of an addressing database that is suitable for integration with operations systems such as billing and provisioning. A key requirement of such a system is the ability to separately identify the following components of an address:

- The physical structure, building, or site in which the address is contained (including the structure's master address)
- The type of space the address refers to—e.g. apartment, office, suite, floor, etc.
- The address itself.

Consequently, the SPATIALnet addressing model represents the geographical location of one or more addresses as a *Building*. Each building has its own address, and may contain one or more internal addresses, such as apartments or offices. Each internal address optionally has a *Unit Type*, which can be used to identify offices, commercial premises, residential addresses, etc. This is summarized in the diagram below:

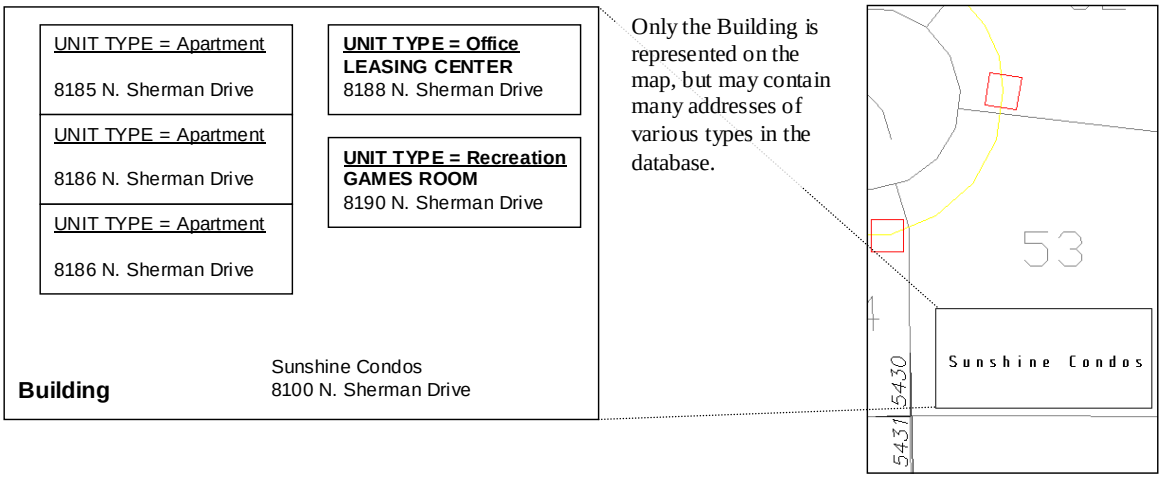


Figure 56 – Diagram illustrating the Building/Address relationship, with addresses of different Unit Types.

Although there is a separation of the various addressing components in the database, SPATIALnet requires that an address only be entered once. If there is only one address associated with a building, such as is the case for a single dwelling unit, you will only need to enter the address once and SPATIALnet will create the necessary database records automatically.

Creating a building definition

Buildings are address location markers, which represent the geographical location of one or more addresses. They can be represented either as a symbol, as a boundary (e.g. the perimeter of a large site or campus), or both. In addition, building types can be configured to only contain a single address (such as a single dwelling unit), or multiple addresses (such as an MDU, apartment building, commercial complexes, etc.).

To create a Building definition, select the **SPATIALnet > Dictionaries > Landbase Definitions**, then highlight and click on **Building Definitions.** This action displays the **Building Definitions** dialog box.

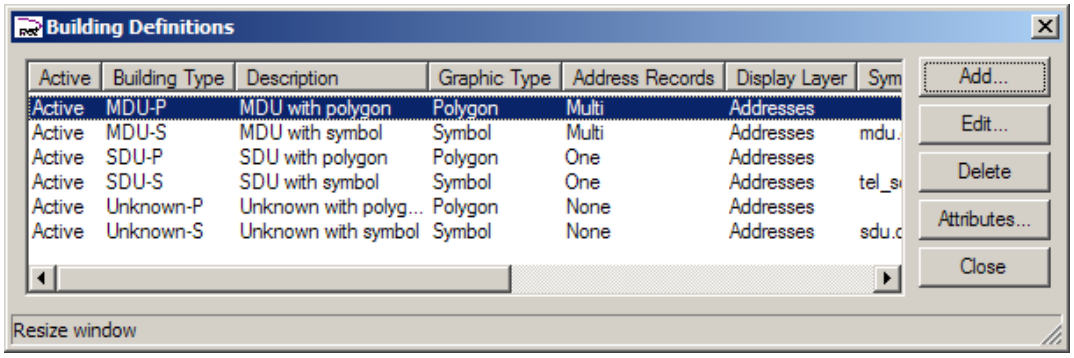


Figure 57 – Building Definitions dialog box

The **Building Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Building Type:	Uniquely identifying type of building..
Description:	Description of Building type.
Graphic Type	Specifies whether the building type will be represented in the map as a symbol or a polygon (i.e. a boundary)

Address Records	Specifies the number of address records to be associated with this building type. Allowed options and their meanings are: **None** No address records will be associated with this building type. The building may be represented on the map, and may be annotated with a Street Number, but no address record will be associated with it. **One** Exactly one address may be associated with this building type **Multi** Zero or more addresses may be associated with this building type.
Display Layer:	CAD layer that this building type is to be displayed in.
Symbol Name:	Name of the CAD block that will be used to represent buildings of this type.
Symbol Scale:	The scaling factor to apply to the symbol representing buildings of this type whenever it is rendered into a CAD view.
Shape:	The approximate shape of the symbol being used. This is used to trim drop lines attached to the building so that they don't overlap the address symbol.
Symbol Width:	The width of the symbol. This is used to trim drop lines attached to the building so that they don't overlap the address symbol.
Symbol Height:	The height of the symbol. This is used to trim drop lines attached to the building so that they don't overlap the address symbol.

To add a new Address Definition, click the **Add** button. The **Add Building Definition** dialog box should now be displayed.

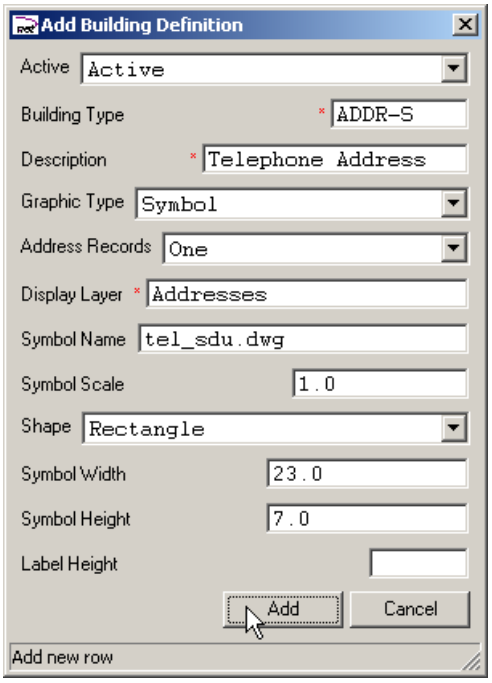


Figure 58 – Add Building Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button.

The new building definition type should then be visible in the **Building Definitions** dialog box.

Editing a building definition

Once a building type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a building type in the Building Definitions dictionary, select the **SPATIALnet > Dictionaries > Landbase Definitions > Building Definitions...** menu option. This action should display the **Building Definitions** dialog box. Highlight the building definition to be edited, and click on the **Edit** button as shown below.

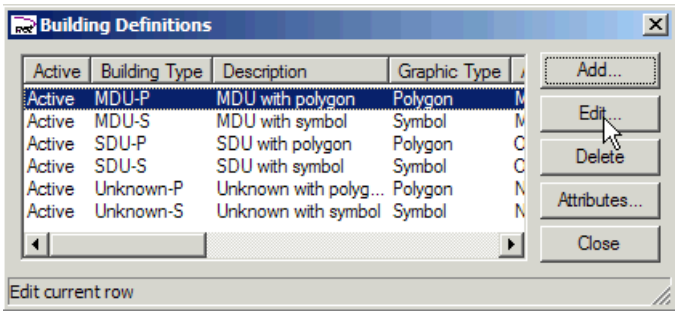


Figure 59 – Building Definitions dialog box

This will display the **Edit Building Definition** dialog box.

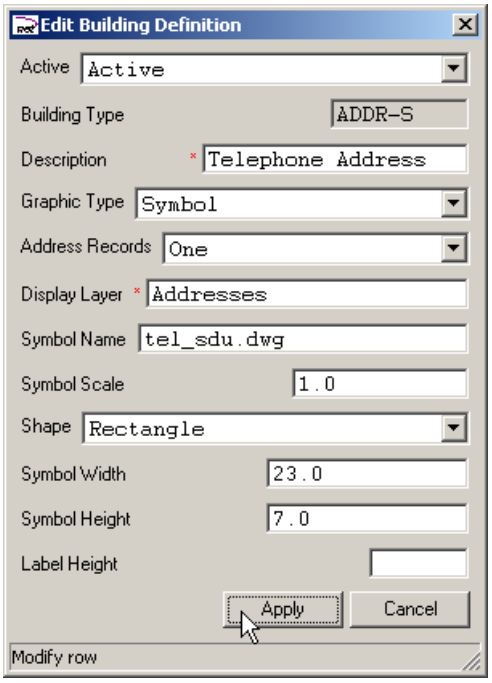


Figure 60 – Edit Building Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified address definition type should then be visible in the **Building Definitions** dialog box.

Note: As a "Building Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a building definition

To delete a building type definition from the Building type dictionary, select the **SPATIALnet > Dictionaries > Landbase Definitions > Building Definitions...** menu. This action should display the **Building Definitions** dialog box. Highlight the building type

you wish to delete, and click on the **Delete** button. The deleted building type should no longer be visible in the **Building Definitions** dialog box.

Note: If the building type you wish to delete is currently in use in the database, you will not be permitted to delete that building type from the dictionary.

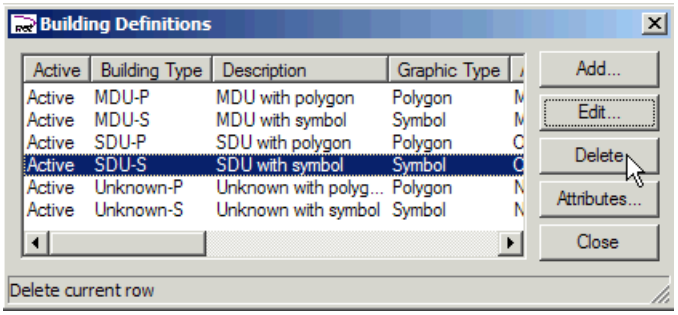


Figure 61 – Deleting a Building type from the Building Definitions dialog box

Creating a unit type definition

Unit types allow different types of addresses to be tracked within a single building. For further details of the way SPATIALnet uses units in its representation of addresses, see Figure 56 on page 48.

To create a Unit definition, select the **SPATIALnet > Dictionaries > Landbase Definitions**, then highlight and click on **Unit Definitions.** This action displays the **Unit Definitions** dialog box.

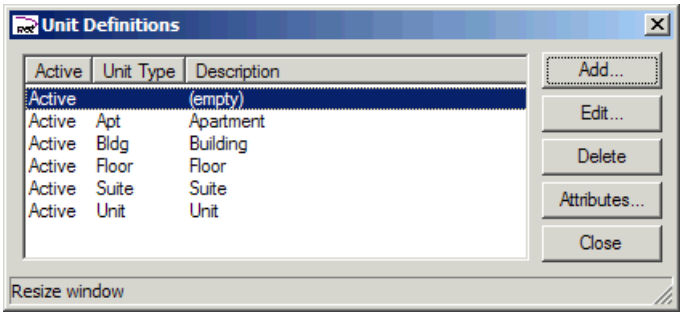


Figure 62 – Unit Definitions dialog box

The **Unit Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive",

	new instances of this type *cannot* be created.
Unit Type:	Uniquely identifying type of unit.
Description:	Description of the Unit type.

To add a new Address Definition, click the **Add** button. The **Add Unit Definition** dialog box should now be displayed.

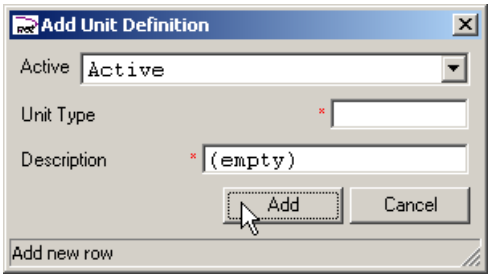


Figure 63 – Add Unit Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button.

The new unit definition type should then be visible in the **Unit Definitions** dialog box.

Editing a unit definition

Once a unit type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a unit type in the Building Definitions dictionary, select the **SPATIALnet > Dictionaries > Landbase Definitions > Unit Definitions...** menu option. This action should display the **Unit Definitions** dialog box. Highlight the unit definition to be edited, and click on the **Edit** button as shown below.

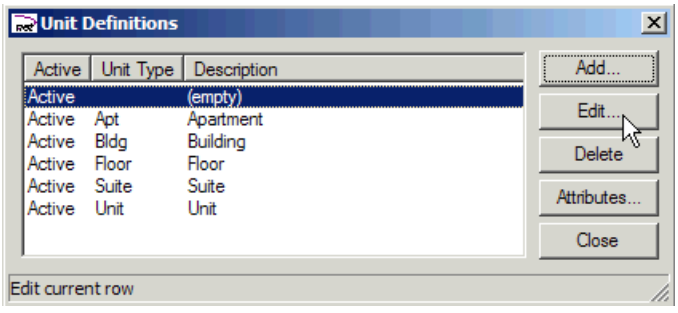


Figure 64 – Unit Definitions dialog box

This will display the **Edit Unit Definition** dialog box.

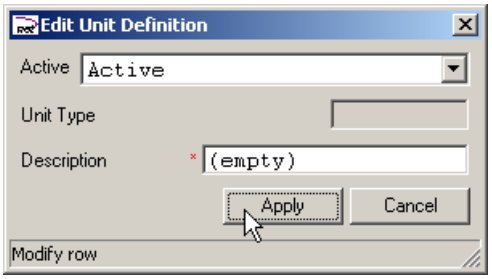


Figure 65 – Edit Unit Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified address definition type should then be visible in the **Unit Definitions** dialog box.

Note: As a "Unit Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a unit definition

To delete a unit type definition from the Unit type dictionary, select the **SPATIALnet > Dictionaries > Landbase Definitions > Unit Definitions...** menu. This action should display the **Unit Definitions** dialog box. Highlight the building type you wish to delete, and click on the **Delete** button. The deleted building type should no longer be visible in the **Unit Definitions** dialog box.

Note: If the unit type you wish to delete is currently in use in the database, you will not be permitted to delete that unit type from the dictionary.

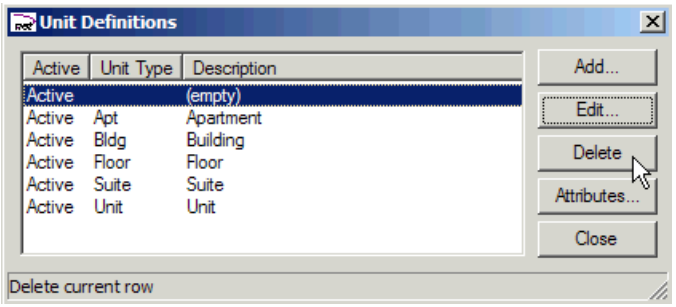


Figure 66 – Deleting a Unit type from the Unit Definitions dialog box

Creating a boundary definition

Boundaries are polygons which can be used to organize your map and help you to navigate to specific areas more easily. For example, you could create a boundary

type called COUNTY for storing county boundaries, another called TOWNSHIP for township boundaries, and another called NODES for boundaries defining the area served by a network node. There are no limits or restrictions on the types of boundaries you can define, and once created, you can search for specific boundaries and zoom directly to their location as described in **XX**, or search for and count entities of specific types within a boundary, as described in **XX**.

To create a boundary definition, select the **SPATIALnet > Dictionaries > Landbase Definitions** , then highlight and click on **Boundary Definitions.** This action displays the **Boundary Definitions** dialog box.

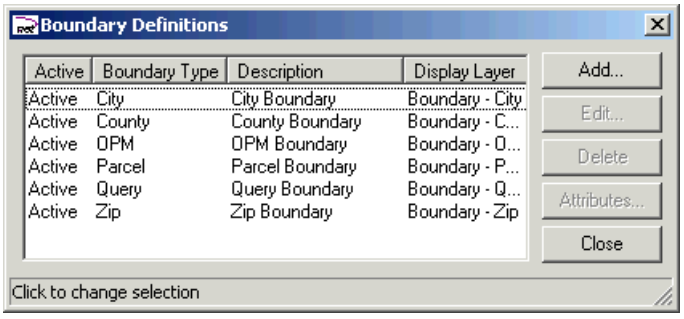


Figure 67 – Boundary Definitions dialog box

The **Boundary Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Boundary Type:	Uniquely identifying type of boundary.
Description:	Description of boundary type.
Read Only:	(Select from pull-down menu.)
Service Area Type:	(Select from pull-down menu.)
Display Layer:	CAD layer which boundary type is to be displayed in.
Zoom Level:	(Select from pull-down menu.)

To add a new Boundary Definition, click the **Add** button. The **Add Boundary Definition** dialog box should now be displayed.

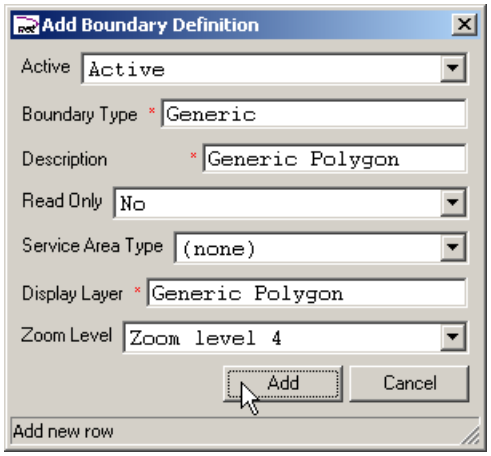


Figure 68 – Add Boundary Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button.

The new boundary definition type should then be visible in the **Boundary Definitions** dialog box.

Editing a boundary definition

Once a boundary type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a boundary type in the Boundary Definitions dictionary, select the **SPATIALnet > Dictionaries > Landbase Definitions > Boundary Definitions...** menu. This action should display the **Boundary Definitions** dialog box. Highlight the boundary definition to be edited, and click on the **Edit** button as shown below.

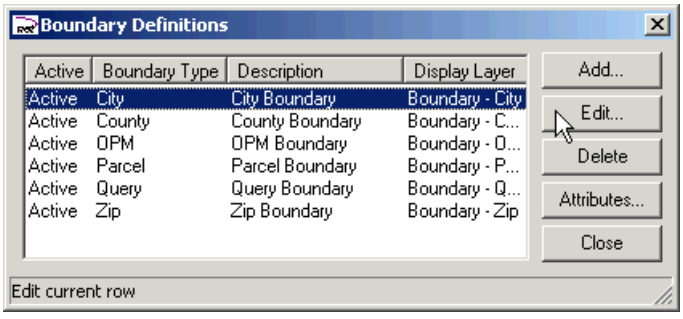


Figure 69 – Boundary Definitions dialog box

This will display the **Edit Boundary Definition** dialog box.

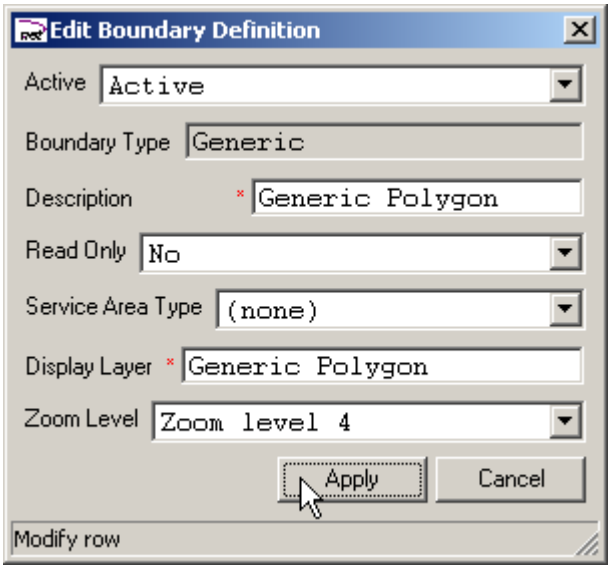


Figure 70 – Edit Boundary Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified boundary definition type should then be visible in the **Boundary Definitions** dialog box.

Note: As a "Boundary Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a boundary definition

To delete a boundary type definition from the address type dictionary, select the **SPATIALnet > Dictionaries > Landbase Definitions > Boundary Definitions...** menu. This action should display the **Boundary Definitions** dialog box. Highlight the boundary type you wish to delete, and click on the **Delete** button. The deleted boundary type should no longer be visible in the **Boundary Definitions** dialog box.

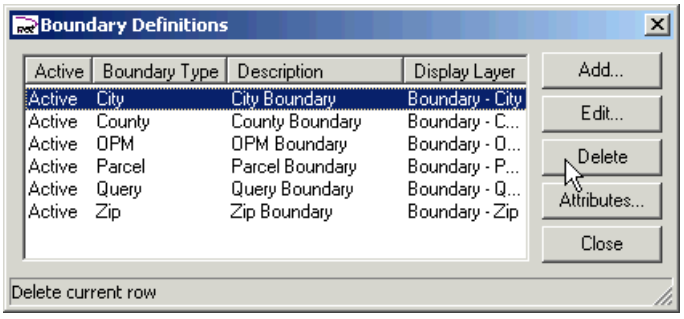


Figure 71 – Deleting a boundary type from the Boundary Definitions dialog box

Creating a plant owner type

To configure a plant owner type, use the **SPATIALnet > Dictionaries > Other Definitions >** command to bring up the menu box, then highlight and click on **Plant Owner Definitions...**. This action displays the **Plant Owner Definitions** dialog box.

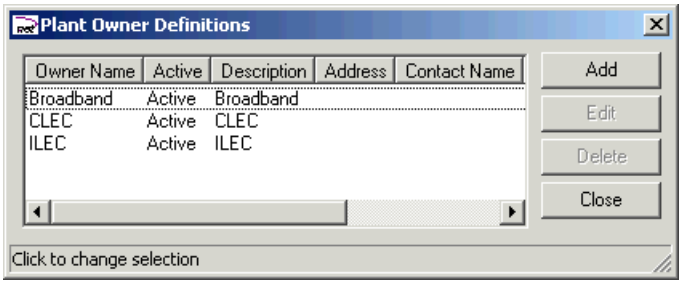


Figure 72 – Plant Owner Definitions dialog box

The **Plant Owner Definitions** dialog box contains the following fields:

Owner Name:	Name of plant owner.
Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Description:	Description of plant.
Address:	Address of plant.
Contact Name:	Contact name.
Contact Phone:	Contact phone number.
Contact E-Mail:	Contact e-mail address.

To add a plant owner type, click the **Add** button. The **Add Plant Owner Definition** dialog box should now be displayed.

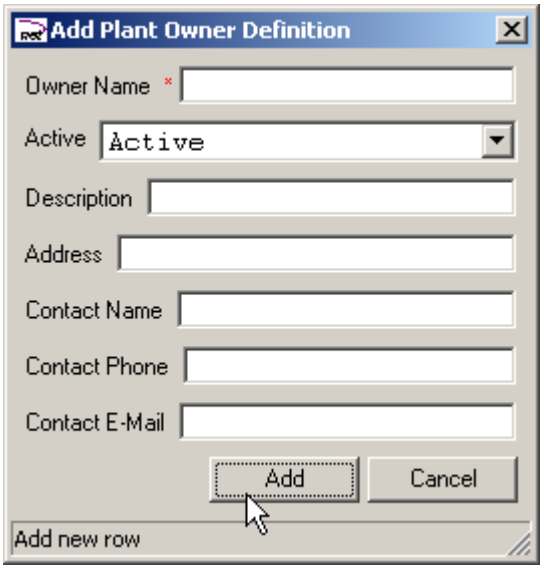


Figure 73 – Add Plant Owner Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new plant owner type should then be visible in the **Plant Owner Definitions** dialog box.

Editing a plant owner type

Once a plant owner type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a plant owner type in the plant owner type dictionary, select the **SPATIALnet > Dictionaries > Other Definitions** command to bring up the menu box, then highlight and click on **Plant Owner Definitions...**. This action displays the **Plant Owner Definitions** dialog box. Highlight the plant owner type to be edited, and click on the **Edit** button as shown below.

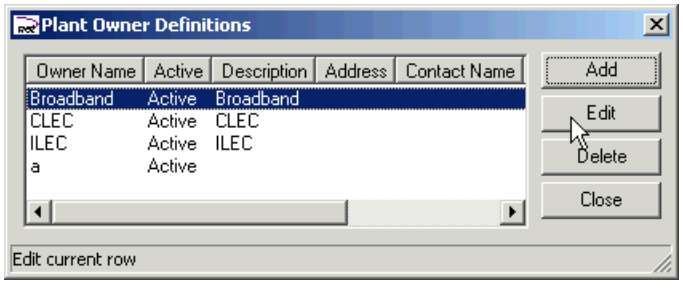


Figure 74 – Plant Owner Definitions dialog box

This will display the **Edit Cable Definition** dialog box.

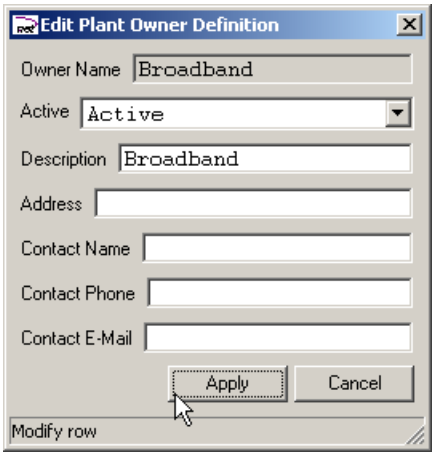


Figure 75 – Edit Plant Owner Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified plant owner type should then be visible in the **Plant Owner Definitions** dialog box.

Note: As an "Owner Name" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a plant owner type

To delete a plant owner type from the plant owner dictionary, select the **SPATIALnet > Dictionaries > Other Definitions > Plant Owner Definitions...** menu. This action should display the **Plant Owner Definitions** dialog box. Highlight the plant owner type you wish to delete, and click on the **Delete** button. The deleted plant owner type should no longer be visible in the **Plant Owner Definitions** dialog box.

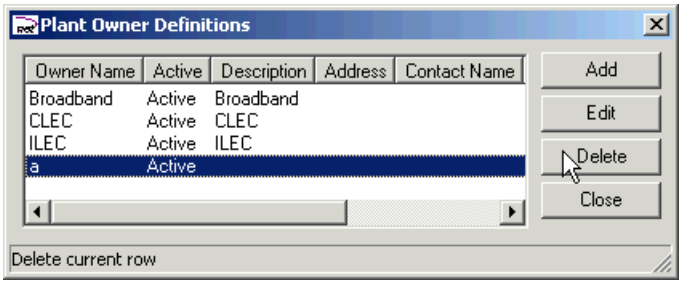


Figure 76 – Deleting a Plant Owner type from the Plant Owner Definitions dialog box

Creating a parcel type

To configure a parcel type, use the **SPATIALnet > Dictionaries > Landbase Definitions** command to bring up the menu box, then highlight and click on **Parcel Definitions...**. This action displays the **Parcel Definitions** dialog box.

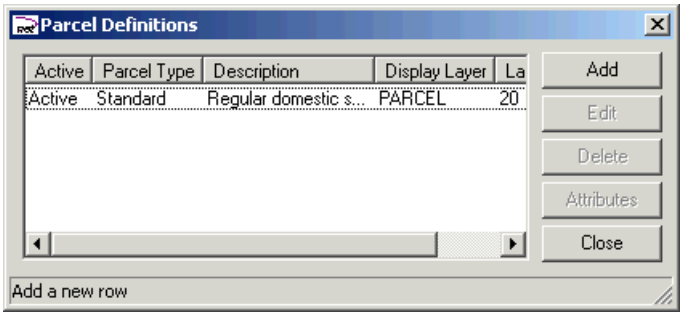


Figure 77 – Parcel Definitions dialog box

The **Parcel Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Parcel type:	Type of parcel.
Description:	Description of parcel type.
Display Layer:	AutoCAD layer on which the parcel is to be displayed.
Label Height:	Text height for parcel annotation label.

To add a parcel type, click the **Add** button. The **Add Parcel Definition** dialog box should now be displayed.

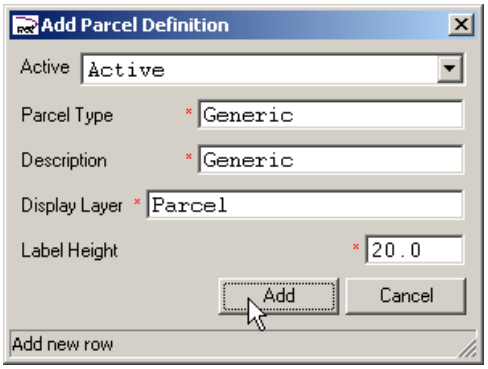


Figure 78 – Add Parcel Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new parcel type should then be visible in the **Parcel Definitions** dialog box.

Editing a parcel type

Once a parcel type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a parcel type in the parcel type dictionary, select the **SPATIALnet > Dictionaries > Landbase Definitions** command to bring up the menu box, then highlight and click on **Parcel Definitions**.... This action displays the **Parcel Definitions** dialog box. Highlight the parcel type to be edited, and click on the **Edit** button as shown below.

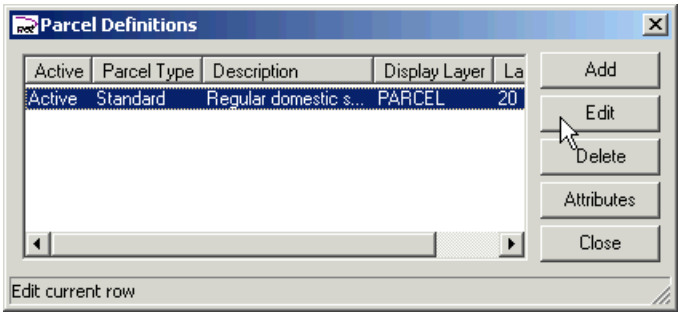


Figure 79 – Parcel Definitions dialog box

This will display the **Edit Parcel Definition** dialog box.

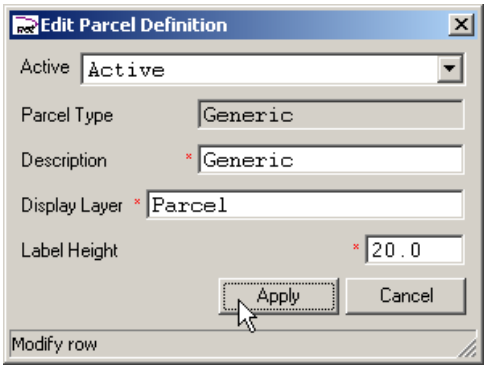


Figure 80 – Edit Parcel Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified parcel type should then be visible in the **Parcel Definitions** dialog box.

Note: As a "Parcel Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a parcel type

To delete a parcel type from the parcel type dictionary, select the **SPATIALnet > Dictionaries > Landbase Definitions > Parcel Definitions...** menu. This action should display the **Parcel Definitions** dialog box. Highlight the parcel type you wish to delete, and click on the **Delete** button. The deleted parcel type should no longer be visible in the **Parcel Definitions** dialog box.

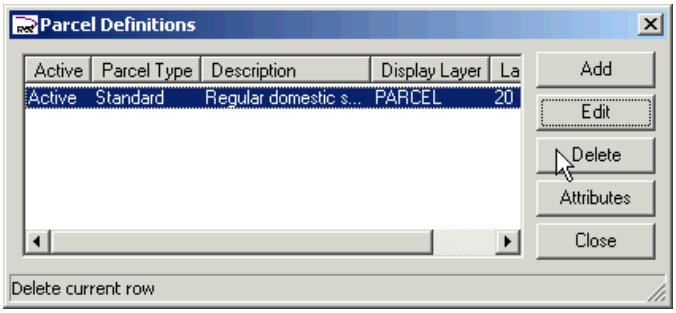


Figure 81 – Deleting a Parcel type from the Parcel Definitions dialog box

Creating a road type

Roads are polylines that can be used to depict the centre lines of streets.

To create a road definition, select the **SPATIALnet > Dictionaries > Landbase Definitions**, then highlight and click on **Road Definitions.** This action displays the **Road Definitions** dialog box.

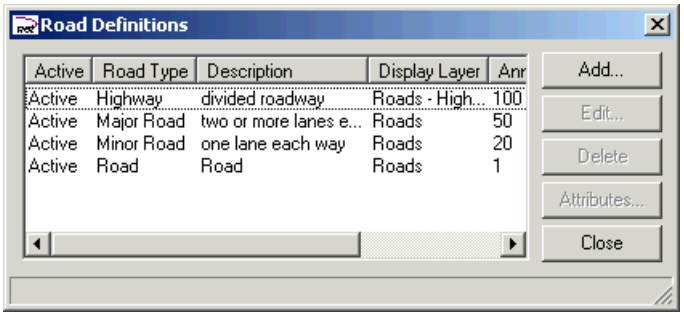


Figure 82 – Road Definitions dialog box

The **Road Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected

	when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Road Type:	Uniquely identifying type of road.
Description:	Description of road type.
Display Layer:	CAD layer which road type is to be displayed in.
Annotation Height:	Text height for the Road name annotation.
Road Width:	The width of the road. This is used for generating road edges from the centerlines.

To add a new Road Definition, click the **Add** button. The **Add Road Definition** dialog box should now be displayed.

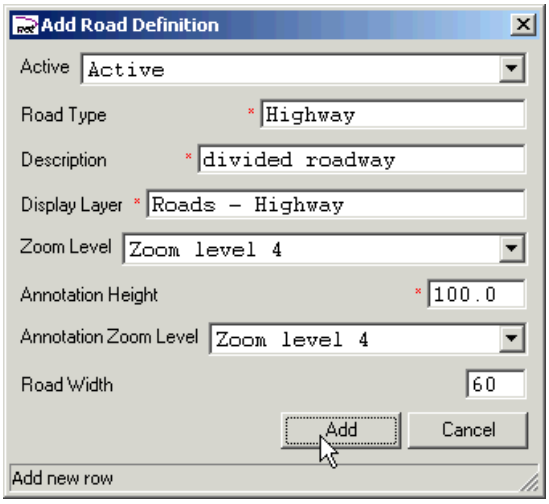


Figure 83 – Add Road Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button.

The new road definition type should then be visible in the **Road Definitions** dialog box.

Editing a road definition

Once a road type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a road type in the Road Definitions dictionary, select the **SPATIALnet > Dictionaries > Landbase Definitions > Road Definitions...** menu. This action should display the **Road Definitions** dialog box. Highlight the road definition to be edited, and click on the **Edit** button as shown below.

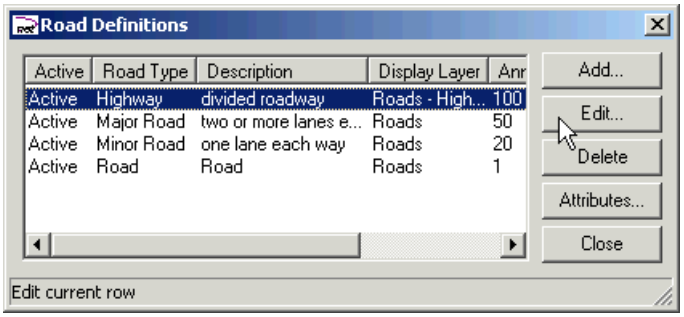


Figure 84 – Road Definitions dialog box

This will display the **Edit Road Definition** dialog box.

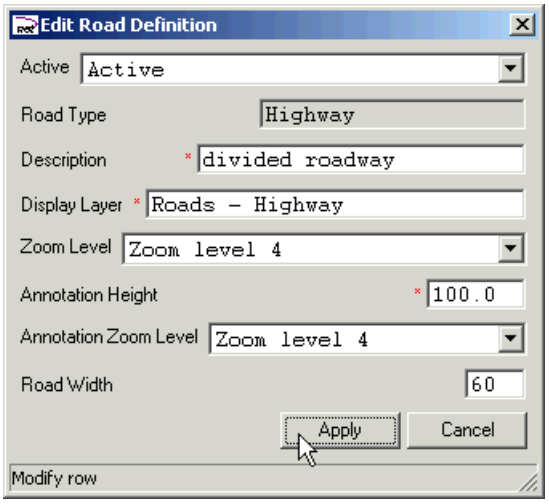


Figure 85 – Edit Road Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified road definition type should then be visible in the **Road Definitions** dialog box.

Note: As a "Road Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a road definition

To delete a road type definition from the road type dictionary, select the **SPATIALnet > Dictionaries > Landbase Definitions > Raod Definitions...** menu. This action should display the **Road Definitions** dialog box. Highlight the road type you wish to delete, and click on the **Delete** button. The deleted road type should no longer be visible in the **Road Definitions** dialog box.

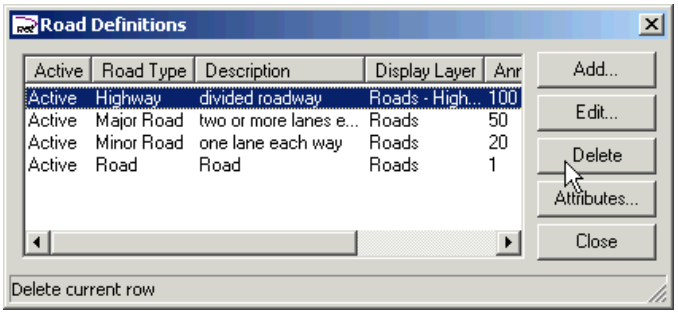


Figure 86 – Deleting a Road type from the Road Definitions dialog box

Creating a support node housing type

To configure a support node housing type, use the **SPATIALnet > Dictionaries > Support Structure Definitions** command to bring up the menu box, then highlight and click on **Support Node Housing Definitions...**. This action displays the **Support Node Housing Definitions** dialog box.

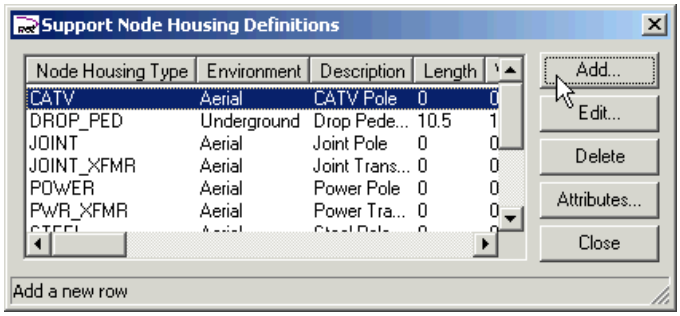


Figure 87 – Support Node Housing Definitions dialog box

The **Support Node Housing Definitions** dialog box contains the following fields:

Node Housing Type:	Name for this node housing type.
Environment:	Select **Aerial** or **Underground** from drop down menu.
Description:	Description of this node housing type.
Length:	Length of the node housing type.
Width:	Width of the node housing type.
Height:	Height of the node housing type.
Attachment Tolerance:	Distance from the node housing that the system should scan when using proximity functions to attach equipment or strand.
Annotation Types:	The types of annotation which may associated with this type of node housing.

Symbol Name:	The block name used to display this node housing type.
Display Layer:	The CAD layer used to display this node housing type.
Symbol Scale:	The scale factor applied to this node housing type's symbol.
Residential House Count Attribute Name:	Attribute used to display the residential house count in the node housing symbol.
Commercial House Count Attribute Name:	Attribute used to display the residential house count in the node housing symbol.
Symbol Shape:	Select **rectangle** or **circle** from drop down menu.
Symbol Width:	Width of the symbol in map units
Symbol Height:	Height of the symbol in map units
Attachment Classes:	Classes of equipment which may be attached to this node housing type.
Cost:	Enter cost details here.
Boundary Type:	Select boundary type for drop down menu.

To add a support node housing definition, click the **Add** button. The **Add Support Node Housing Definition** dialog box should now be displayed.

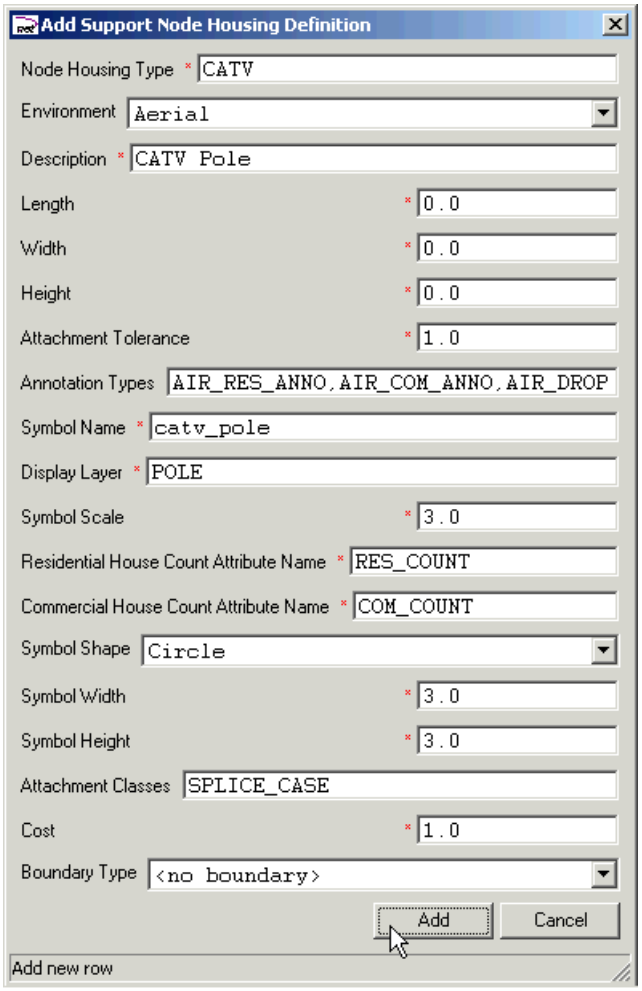


Figure 88 – Add Support Node Housing Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new support node housing type should then be visible in the **Support Node Housing Definitions** dialog box.

Editing a support node housing type

Once a support node housing type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a support node housing type in the support node housing type dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support Node Housing Definitions...** menu. This action should display the **Support Node Housing Definitions** dialog box. Highlight the support node housing to be edited, and click on the **Edit** button as shown below.

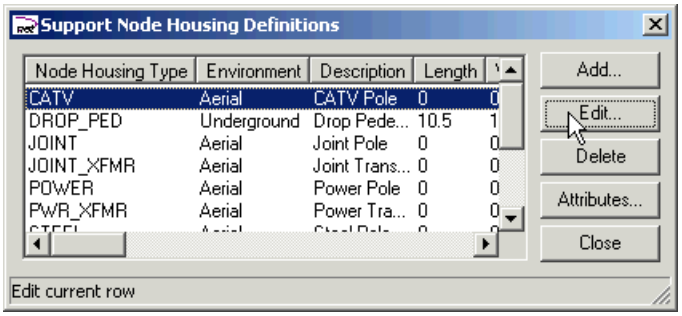


Figure 89 – Support Node Housing Definitions dialog box

This will display the **Edit Support Node Housing Definition** dialog box.

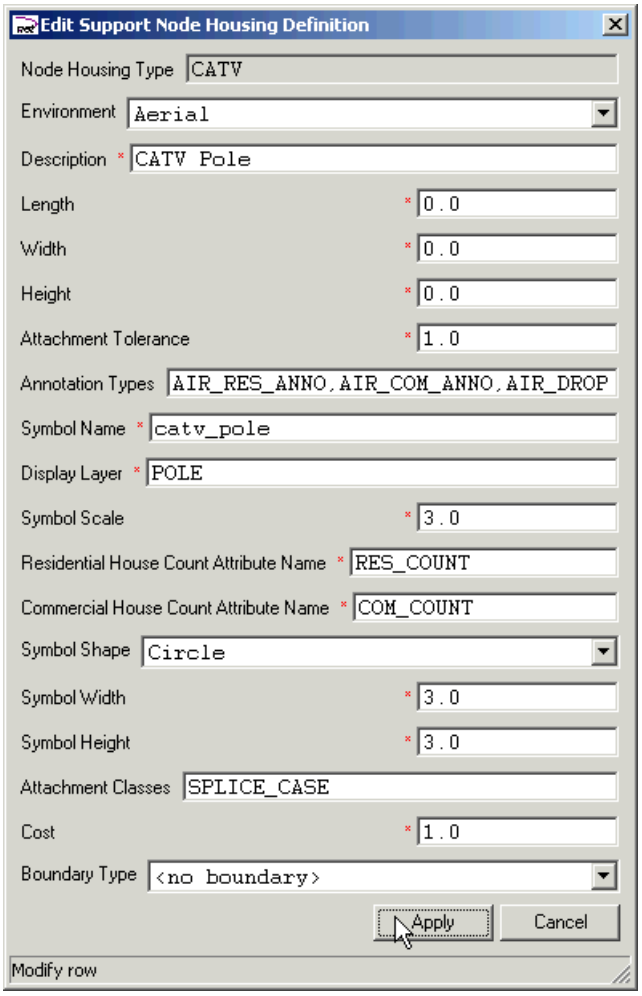


Figure 90 – Edit Term Panel Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified support node housing type should then be visible in the **Support Node Housing Definitions** dialog box.

Note: As "Node Housing Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a support node housing type

To delete a support node housing type from the Support Node Housing dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support Node Housing Definitions...** menu. This action should display the **Support Node Housing Definitions** dialog box. Highlight the support node housing type you wish to delete, and click on the **Delete** button. The selected support node housing type should now be removed from the **Support Node Housing Definitions** dialog box.

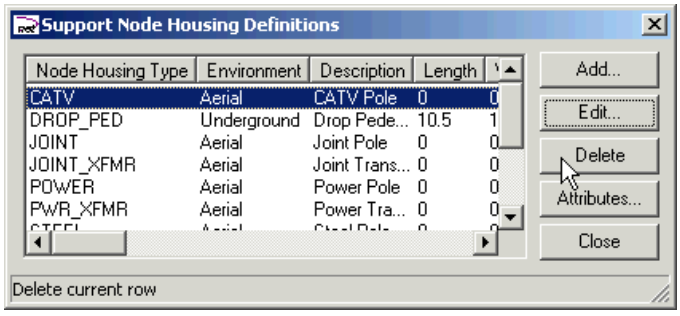


Figure 91 – Deleting from the Support Node Housing Definitions dialog box

Creating a support node annotation type

To configure a support node annotation type, use the **SPATIALnet > Dictionaries > Support Structure Definitions** command to bring up the menu box, then highlight and click on **Support Node Annotation Definitions....** This action displays the **Support Node Annotation Definitions** dialog box.

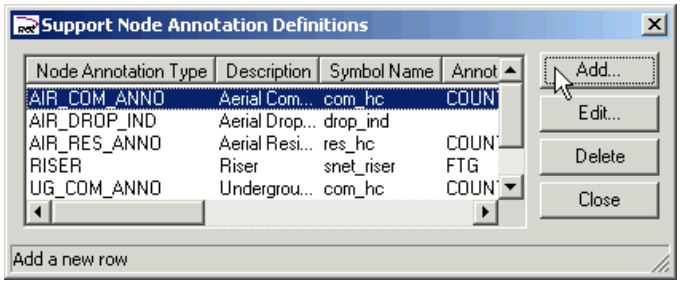


Figure 92 – Support Node Annotation Definitions dialog box

The **Support Node Annotation Definitions** dialog box contains the following fields:

Node Annotation Type:	Name of the support node housing annotation type
Description:	Description of this annotation type
Symbol Name:	Block name used to represent this annotation
Annotation Attribute Name:	CAD block attribute used to display the annotation value
Symbol Scale:	Scale factor applied when drawing the annotation block
Display Layer:	Layer used to display the annotation block
Node Attribute Name:	Attribute of the Node Housing database record from which the annotation will be read.
Offset X:	X offset from the node housing's insertion point at which the annotation will be placed.
Offset Y:	Y offset from the node housing's insertion point at which the annotation will be placed.
Conditional:	

To add a new support node annotation type, click the **Add** button. The **Add Support Node Annotation Definition** dialog box should now be displayed.

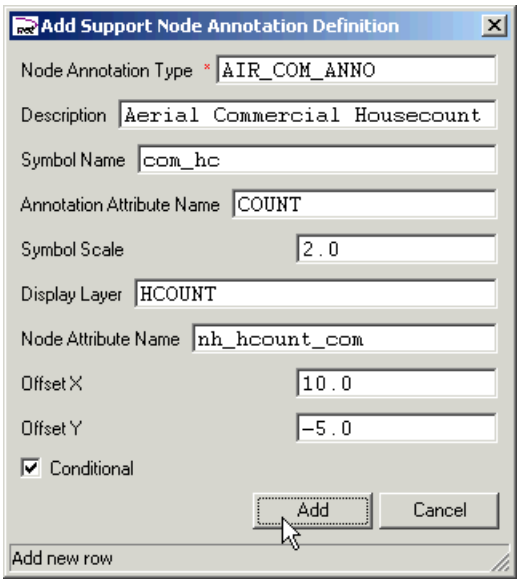


Figure 93 – Add Support Node Annotation Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new support node annotation type should then be visible in the **Support Node Annotation Definitions** dialog box.

Editing a support node annotation type

Once a support node annotation type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a support node annotation type in the ssupport node annotation dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support Node Annotation Definitions...** menu. This action should display the **Support Node Annotation Definitions** dialog box. Highlight the ssupport node annotation type to be edited, and click on the **Edit** button as shown below.

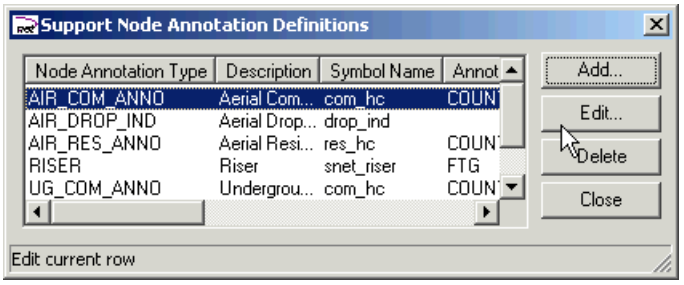


Figure 94 – Support Node Annotation Definitions dialog box

This will display the **Edit Support Node Annotation Definition** dialog box.

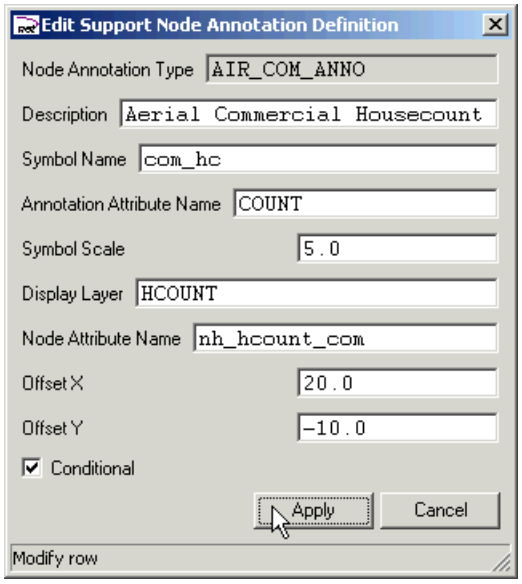


Figure 95 – Edit Support Node Annotation Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified support node annotation type should then be visible in the **Support Node Annotation Definitions** dialog box.

Note: As "Node Annotation Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a support node annotation type

To delete a support node annotation type from the Support Node Annotation dictionary, select the **SPATIALnet > Dictionaries > Support Structre Definitions > Support Node Annotation Definitions...** menu. This action should display the **Support Node Annotation Definitions** dialog box. Highlight the support node annotation type you wish to delete, and click on the **Delete** button. The selected support node annotation type should now be removed from the **Support Node Annotation Definition** dialog box.

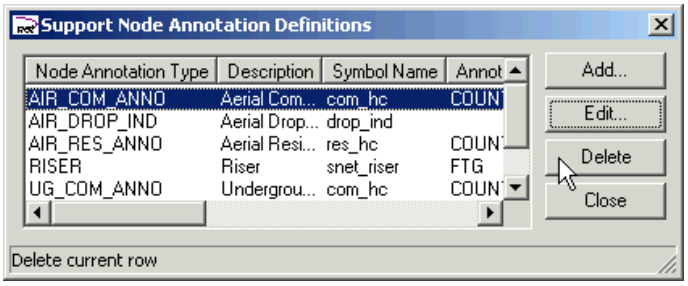


Figure 96 – Deleting from the Support Node Annotation Definition dialog box

Creating a support anchor type

To configure a support anchor type, use the **SPATIALnet > Dictionaries > Support Struction Definitions** command to bring up the menu box, then highlight and click on **Support Anchor Definitions....** This action displays the **Support Anchor Definitions** dialog box.

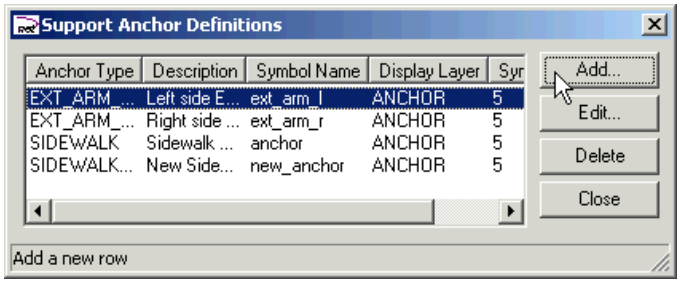


Figure 97 – Support Anchor Definitions dialog box

The **Support Anchor Definitions** dialog box contains the following fields:

Anchor Type:	Name of this type of anchor
Description:	Description of support anchor.
Symbol Name:	CAD block used to display this anchor type
Display Layer:	Layer used to display this anchor type
Symbol Scale:	Scale factor to apply when displaying the anchor symbol.

To add a support anchor type, click the **Add** button. The **Add Support Anchor Definition** dialog box should now be displayed.

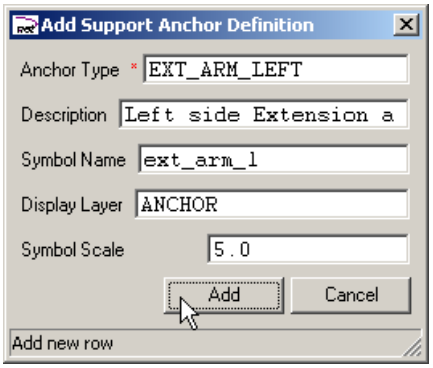


Figure 98 – Add Support Anchor Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new support anchor type should then be visible in the **Support Anchor Definitions** dialog box.

Editing a support anchor type

Once a support anchor type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a support anchor type in the Support Anchor dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support Anchor Definitions...** menu. This action should display the **Support Anchor Definitions** dialog box. Highlight the support anchor to be edited, and click on the **Edit** button as shown below.

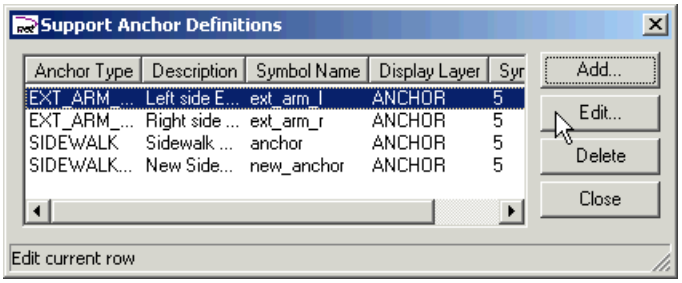


Figure 99 – Support Anchor Definitions dialog box

This will display the **Edit Support Anchor Definition** dialog box.

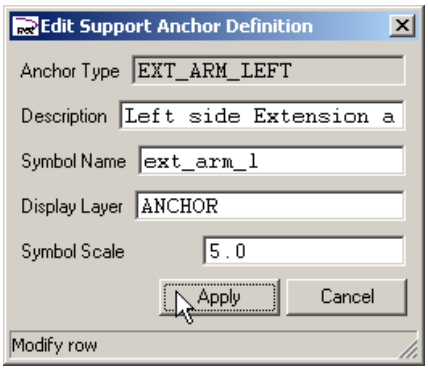


Figure 100 – Edit Support Anchor Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified support anchor type should then be visible in the **Support Anchor Definitions** dialog box.

Note: As "Anchor Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a support anchor type

To delete a support anchor type from the Support Anchor dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support Anchor Definitions...** menu. This action should display the **Support Anchor Definitions** dialog box. Highlight the support anchor type you wish to delete, and click on the **Delete** button. The selected support anchor type should now be removed from the **Support Anchor Definitions** dialog box.

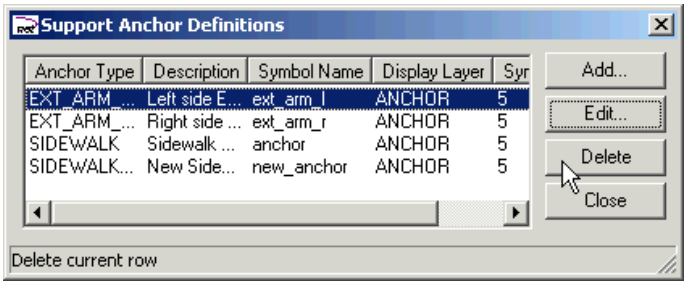


Figure 101 – Deleting from the Support Anchor Definitions dialog box

Creating a support linear housing segment type

To configure a support liner housing segment (support LHS) type, use the **SPATIALnet > Dictionaries > Support Structure Definitions** command to bring up the menu box, then highlight and click on **Support LHS Definitions....** This action displays the **Support Linear Housing Segment Definitions** dialog box.

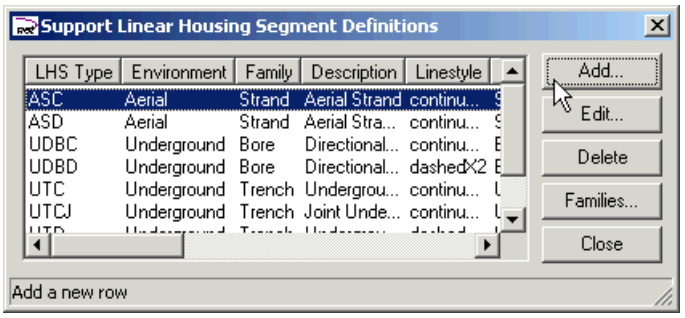


Figure 102 – Support Linear Housing Segment Definitions dialog box

The **Support Linear Housing Segment Definitions** dialog box contains the following fields:

LHS Type:	Name of the support linear housing segment type
Environment:	Aerial (A) or underground (U). Select from pull down menu.
Family:	Select family type from pull down menu.
Description:	Description of support LHS.
Linestyle:	Linestyle to apply when displaying support segments of this type
Display Layer:	Layer to display support segments of this type
Annotation Types:	Name of the annotation types associated with this support segment type

Width:	Linewidth of this support segment type
Status:	Flags whether this defines the Design or Constructed representation of the support segment. Select from pull down menu.
Joint Trench:	Flags whether this is a joint trench type. Select from pull down menu.
Promote Target:	Checked if CAD polylines matching the above characteristics should automatically be promoted to modeled support segments.
Attachment Classes:	Names of classes which may be attached to the support segment (usually cable types)
Attachment Tolerance:	Distance that the proximity scanner will search for attached equipment, in map units.
Cost:	Insert cost details here.

To add a new support LHS type, click the **Add** button. The **Add Support Linear Housing Definition** dialog box should now be displayed.

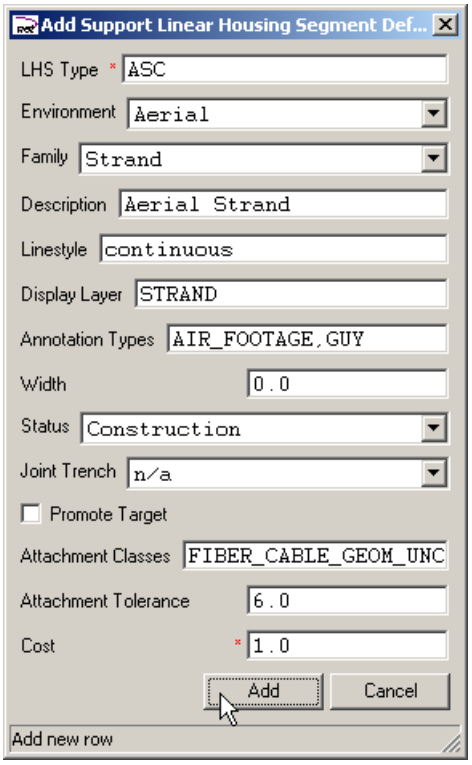


Figure 103 – Add Support Linear Housing Segment Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new support linear housing segment type should then be visible in the **Support Linear Housing Segment Definitions** dialog box.

Editing a support LHS type

Once a support linear housing segment type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a support linear housing segment type in the Support Linear Housing Segment dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support LHS Definitions...** menu. This action should display the **Support Linear Housing Segment Definitions** dialog box. Highlight the support linear housing segment definition to be edited, and click on the **Edit** button as shown below.

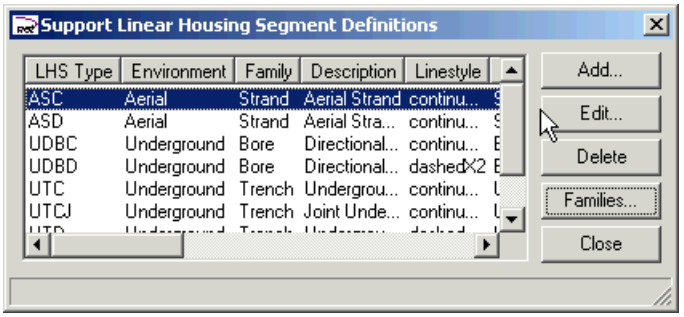


Figure 104 – Support Linear Housing Segment Definitions dialog box

This will display the **Edit Support Linear Housing Segment Definition** dialog box.

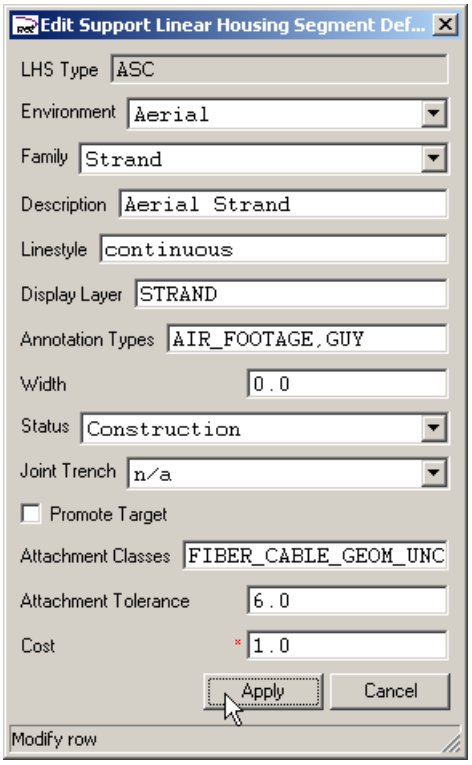


Figure 105 – Edit Support Linear Housing Segment Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified support linear housing segment type should then be visible in the **Support Linear Housing Segment Definitions** dialog box.

Note: As "LHS type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a support LHS type

To delete a support linear housing segment type from the Support Linear Housing Segment dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support LHS Definitions...** menu. This action should display the **Support Linear Housing Segment Definitions** dialog box. Highlight the support linear housing segment type you wish to delete, and click on the **Delete** button. The selected support linear housing segment type should now be removed from the **Support Linear Housing Segment Definitions** dialog box.

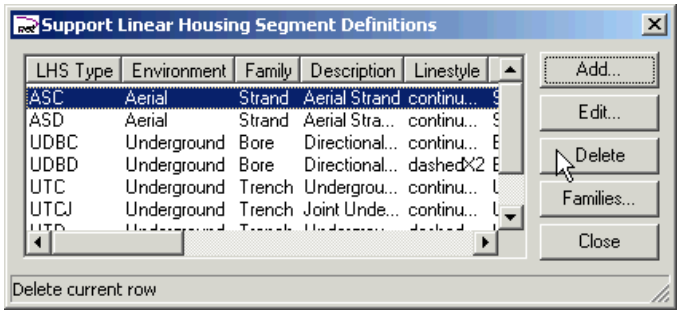


Figure 106 – Deleting from the Support Linear Housing Segment Definitions dialog box

Creating a support LHS annotation type

To configure a support liner housing segment (support LHS) annotation type, use the **SPATIALnet > Dictionaries > Support Structure Definitions** command to bring up the menu box, then highlight and click on **Support LHS Annotation Definitions....** This action displays the **Support Linear Housing Segment Annotation Definitions** dialog box.

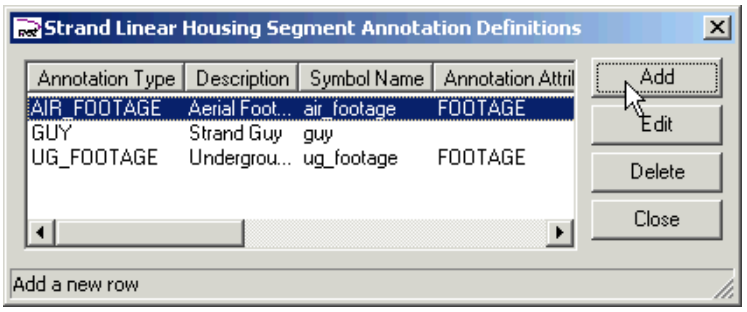


Figure 107 – Support Linear Housing Segment Annotation Definitions dialog box

The **Support Linear Housing Segment Annotation Definitions** dialog box contains the following fields:

Annotation Type:	Name for this annotation type.
Description:	Description of this annotation type
Symbol Name:	Name of the CAD block used to display this annotation type
Annotation Attribute Name:	CAD block attribute used to display the annotation value.
Symbol Scale:	Scale factor applied when drawing the annotation block
Display Layer:	Layer used to display the annotation block
LHS Attribute Name:	Attribute of the Linear Housing database record from which

	the annotation will be read.
Suppressable by content:	
Move With Line:	Specifies whether the annotation should automatically be moved if the line representing the linear housing is moved.
Offset:	Offset the annotation should be drawn relative to the line.

To add a new support LHS annotation type, click the **Add** button. The **Add Support Linear Housing Segment Annotation Definition** dialog box should now be displayed.

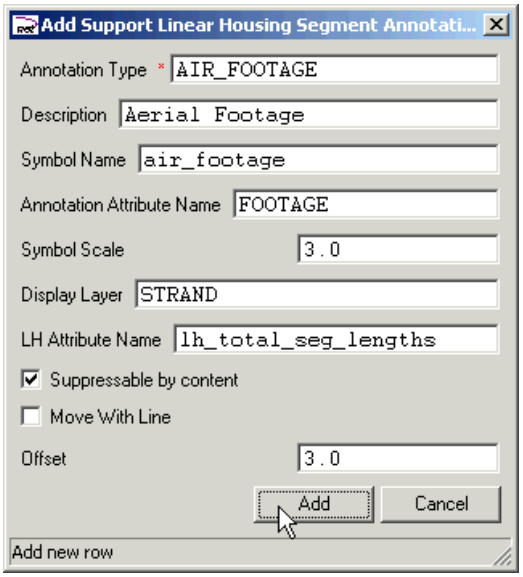


Figure 108 – Add Support Linear Housing Segment Annotation Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new support linear housing segment annotation type should then be visible in the **Support Linear Housing Segment Annotation Definitions** dialog box.

Editing a support LHS annotation type

Once a support linear housing segment annotation type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a support linear housing segment annotation type in the Support Linear Housing Segment Annotation dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support LHS Annotation Definitions...** menu. This action should display the **Support Linear Housing Segment Annotation Definitions** dialog box. Highlight

the support linear housing segment annotation type to be edited, and click on the **Edit** button, as shown below.

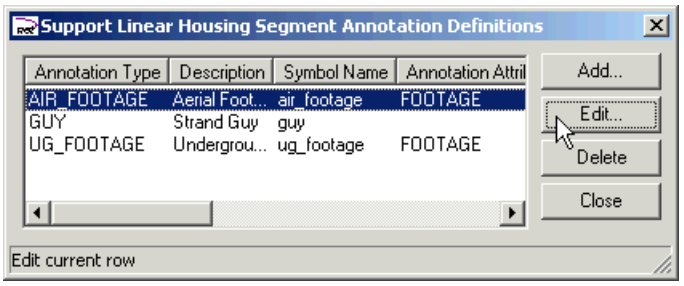


Figure 109 – Support Linear Housing Segment annotation Definitions dialog box

This will display the **Edit Support Linear Housing Segment Annotation Definition** dialog box.

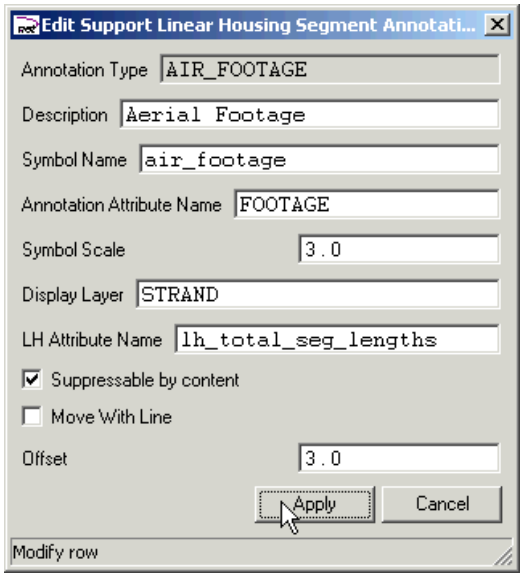


Figure 110 – Edit Support Linear Housing Segment Annotation Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified support linear housing segment annotation type should then be visible in the **Support Linear Housing Segment Annotation Definitions** dialog box.

Note: As "Annotation Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a support LHS annotation type

To delete a support linear housing segment annotation type from the Support Linear Housing Segment Annotation dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support LHS Annotation Definitions...** menu. This action should display the **Support Linear Housing Segment Annotation Definitions** dialog box. Highlight the support linear housing segment annotation type you wish to delete, and click on the **Delete** button. The selected support linear housing segment annotation type should now be removed from the **Support Linear Housing Segment Annotation Definitions** dialog box.

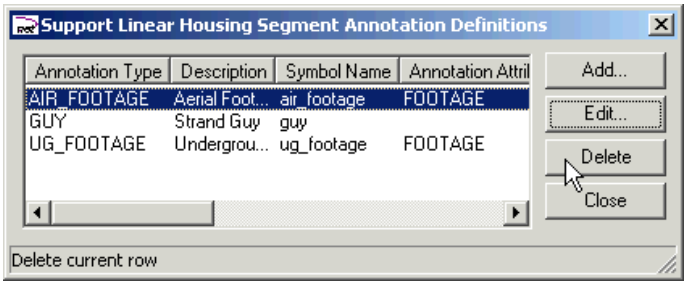


Figure 111 – Deleting from the Support Linear Housing Segment Annotation Definitions dialog box

Creating a support drop type

To configure a support drop type, use the **SPATIALnet > Dictionaries > Support Structure Definitions** command to bring up the menu box, then highlight and click on **Support Structure Drop Definitions....** This action displays the **Support Drop Type Definitions** dialog box.

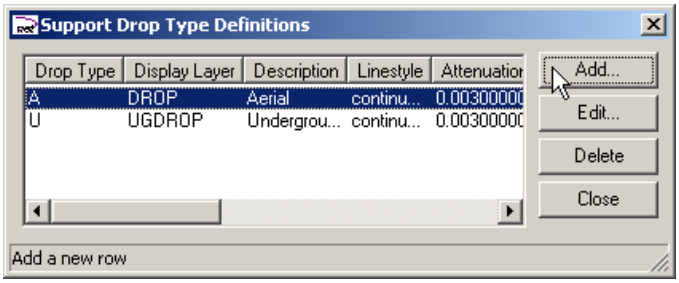


Figure 112 – Support Drop Type Definitions dialog box

The **Support Drop Type Definitions** dialog box contains the following fields:

Drop Type:	Name of the drop type

Display Layer:	Layer in which the drop line is to be displayed
Description:	Description of the drop type
Linestyle:	Linestyle to display the drop line
Attenuation coefficients:	Attenuation per unit of map distance for the drop cable of this type.
Cost:	Insert cost details here.

To add a new support drop type, click the **Add** button. The **Add Support Drop Type Definition** dialog box should now be displayed.

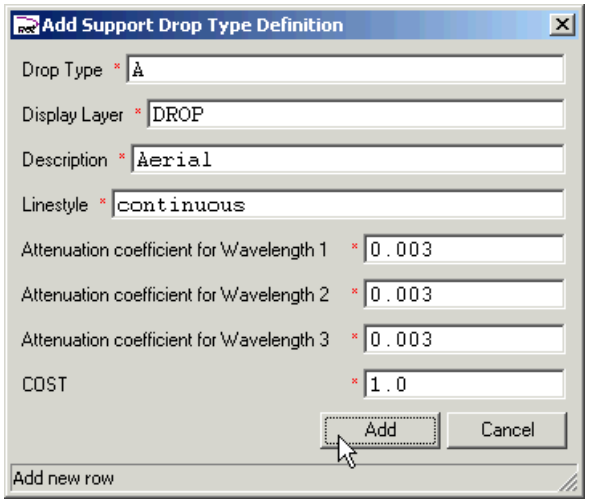


Figure 113 – Add Support Drop Type Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new support drop type should then be visible in the **Support Drop Type Definitions** dialog box.

Editing a support drop type

Once a support drop type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a support drop type in the Support Drop Type dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support Drop Definitions...** menu. This action should display the **Support Drop Type Definitions** dialog box. Highlight the support drop type to be edited, and click on the **Edit** button as shown below.

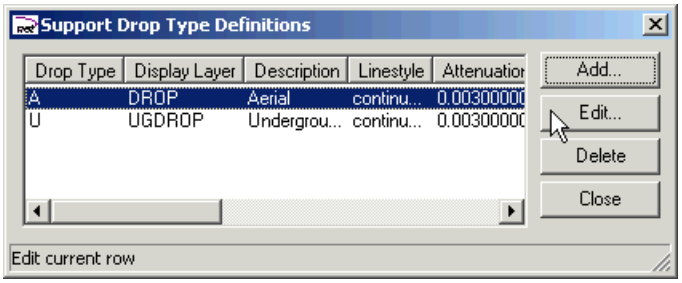


Figure 114 – Support Drop Type Definitions dialog box

This will display the **Edit Support Drop Type Definition** dialog box.

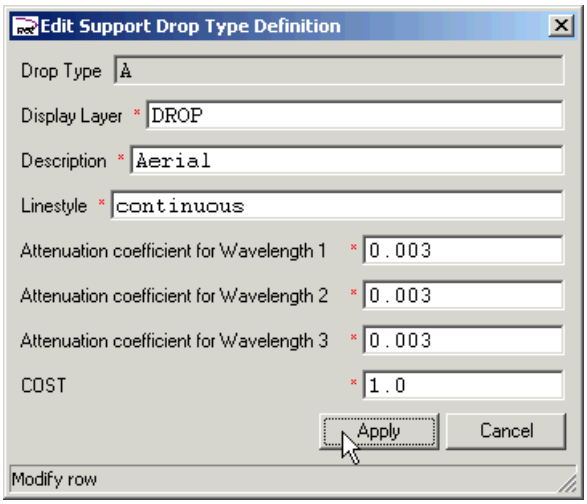


Figure 115 – Edit Support Drop Type Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified support drop type should then be visible in the **Support Drop Type Definitions** dialog box.

Note: As the Drop Type is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a support drop type

To delete a support drop type from the Support Drop Type dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support Drop Definitions...** menu. This action should display the **Support Drop Type Definitions** dialog box. Highlight the support drop type you wish to delete, and click on the **Delete** button. The selected support drop type should now be removed from the **Support Drop Type Definitions** dialog box.

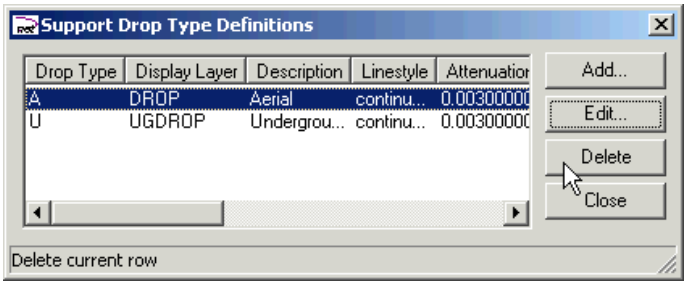


Figure 116 – Deleting from the Support Drop Type Definitions dialog box

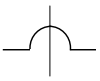
Creating a system parameter type

This version does not support the adding of user defined system parameters. However, it is possible to edit or modify existing system parameters.

Editing a system parameter type

In this version, the following design parameters have been entered in the Design Dictionary:

Parameter	Description
AbandonedEntityLayerName	AutoCAD layer onto which entities in the Abandoned state are rendered
AbandonedEntitySymbolName	Symbol (name of block) added to the graphical representation of entities to indicate that they are in the Abandoned state (usually an X)
AbandonedEntitySymbolRotation	Rotation for symbol with which Abandoned entities are displayed
AbandonedEntitySymbolScale	Scale at which Abandoned Entity Symbol is drawn (**AbandonedEntitySymbolName**)
ACCEPT_OSLOGIN	SPATIALnet will allow users to connect to the system without specifying passwords, if (and only if) the SPATIALnet username they enter exactly matches their Windows logon id (in a case-sensitive comparison). Any password entered on the login form will be ignored.
Address Validation Service	Name of external service used to validate addresses when they are entered into the

Parameter	Description
	system.
Annotation Cable Precision	Number of decimal places to display in cable lengths
Annotation Flip Upright	Set to Y to indicate that annotation should be flipped by 180 degrees when its rotation is between 90 and 270 degrees.
Annotation Strand Precision	Number of decimal places to display in strand and trench lengths
ATTENUATION WAVELENGTH 1 NAME	Name of wavelength 1 at which attenuation is tracked for fiber optic networks (e.g. 1500 nm)
ATTENUATION WAVELENGTH 2 NAME	Name of wavelength 2 at which attenuation is tracked for fiber optic networks (e.g. 1500 nm)
ATTENUATION WAVELENGTH 3 NAME	Name of wavelength 3 at which attenuation is tracked for fiber optic networks (e.g. 1500 nm)
BATCH_USERNAMES	This parameter can be set to a semicolon-separated list of SPATIALnet usernames; if the parameter is defined, then the system will treat those users as though the ACCEPT_OSLOGIN parameter was set to "Y". Other users are unaffected.
Bridge Radius	Default radius to use when creating “bridges” (arc segments inserted into lines to avoid ambiguity when lines intersect). See below: 
CABLE SAG FACTOR	Default Cable Sag Factor value which is set in the Cable Creation panel. 1.0 implies no sag, 1.1 implies 10% sag, etc.
CHECK_CIRCUITS_ON_POST	Check the integrity of cables when posting jobs to catch any potential corruption (**Y = Yes, N = NO**)
ClientOracleSRID	Default Oracle SRID (integer) to be used by SPATIALnet FM clients unless overridden by a job-specific SRID,
CONS_DATA_BLOCK_HEIGHT	Height of data block used in construction drawings

Parameter	Description
CONS_DATA_BLOCK_LAYER	Layer on which data block for construction drawings is drawn.
CONS_DATA_BLOCK_NAME	Name of data block used in construction drawings
CONS_DATA_BLOCK_NUMBER	Number block used in construction drawings
CONS_DATA_BLOCK_SCALE	Scale at which data block is drawn in construction drawings
CONS_DATA_BLOCK_TEXT_WIDTH	Width of text drawn in construction blocks
CONS_DATA_BLOCK_WIDTH	Width of construction data block
CONS_DATA_BLOCK_X_START	X coordinate of point at which text starts in construction block
CONS_DATA_BLOCK_Y_START	Y coordinate at which text starts in construction block
CONS_DRAWING_TEMPLATE	Template to use for construction drawings
CONS_LEADER_ARROW_SIZE	Size of leader line arrows in construction drawings
CONS_LEADER_LAYER	Layer on which leader lines are drawn in construction drawings
CONS_READY_BLOCK_LAYER	Layer on which make-ready blocks are drawn in construction drawings
CONS_READY_BLOCK_NAME	Name of make-ready block in construction drawings
CONS_READY_BLOCK_SCALE	Scale at which make-ready blocks are drawn in construction drawings
CONS_READY_BLOCK_X_OFFSET	X offset to place make-ready block away from pole
CONS_READY_BLOCK_Y_OFFSET	Y offset to place make-ready block away from pole
CONS_REF_BLOCK_LAYER	Layer on which reference block is drawn in construction drawings
CONS_REF_BLOCK_NAME	Name of reference block in construction

Parameter	Description
	drawings
CONS_REF_BLOCK_SCALE	Scale of reference block in construction drawings
CONS_REF_BLOCK_X_OFFSET	X offset of reference block from primary object to which it refers
CONS_REF_BLOCK_Y_OFFSET	Y offset of reference block from primary object to which it refers
Coordsys Type	Coordinate system type (1=Proj.4 2=OraSpatial) used to determine transformation method used
Currency Symbol	Symbol used to denote currency, e.g. $, ¢, ¥, £, etc.
DefaultClientOracleSRID	Default SRID for use with oracle coordinate transforms
DYNAMIC SPLICE SYMBOLS	Set to Y if dynamic splice symbol functionality is enabled for fiber splices. This will automatically re-draw the splice with additional "legs" if more than one cable is present at the splice.
EAMKeyPrefix	String to prefix to the database key generated by the system. This must be less than 8 characters in length and can only include letter and number characters. IDs are of the form *Prefix*nnnnnnnn where nnnnnnnn is an 8-digit sequential number generated by the SEQ_ID sequence in the database. If this parameter is not set, the number part of the ID only is used.
ISP Auto Annotation	Automatically add cable detail annotations to ISP patch cables.
KEYMAP COORDINATES Xmax	Maximum X coordinate of keymap extent
KEYMAP COORDINATES Xmin	Minimum X coordinate of keymap extent
KEYMAP COORDINATES Ymax	Maximum Y coordinate of keymap extent
KEYMAP COORDINATES Ymin	Minimum Y coordinate of keymap extent
Length Units Abbreviation	Abbreviation to display for length units (e.g. ft, m ' etc)

Parameter	Description
LOSS 1 NAME	Name of loss 1 tracked for twisted-pair copper cables (e.g. dB, 2B1Q Loss @ 20kHz, HDSL Loss @192 kHz, etc)
LOSS 2 NAME	Name of loss 2 tracked for twisted-pair copper cables (e.g. dB, 2B1Q Loss @ 20kHz, HDSL Loss @192 kHz, etc)
LOSS 3 NAME	Name of loss 3 tracked for twisted-pair copper cables (e.g. dB, 2B1Q Loss @ 20kHz, HDSL Loss @192 kHz, etc)
offset_str	Not used.
OracleLatLongSRID	SRID (integer) for lat/long conversions
OracleSRID	SRID (integer) used for all spatial tables
RemovedEntityLayerName	AutoCAD layer onto which entities in the Removed state are rendered
RemovedEntitySymbolName	Symbol (name of block) added to the graphical representation of entities to indicate that they are in the Removed state (usually an X)
RemovedEntitySymbolRotation	Rotation for symbol with which Removed entities are displayed
RemovedEntitySymbolScale	Scale at which Removed Entity Symbol is drawn (see **RemovedEntitySymbolRotation**)
RESISTANCE 1 NAME	Name of resistance tracked for feeder cables in twisted-pair copper networks
RESISTANCE 2 NAME	Name of resistance tracked for distribution cables in twisted-pair copper networks
RF INPORT MANIPULATOR DISPLAY	Show in port manipulators for selected RF equipment
RF_CABLE_LEVEL_LOSS_FACTOR	Multiplicative factor for calculating RF loss values based on configured attenuation factors and the length units of the cables.
RF_CABLE_RESISTANCE_FACTOR	RF Cable resistance specified for this amount of unit distance
STAKING_SHEET_TEMPLATE	Drawing template used for staking sheet output.

Parameter	Description
Startup Service	The name of the registered service to run at startup
StoreSRIDinDB	Flag to control whether the SRID is written to the database in all geometries (0=No 1=Yes)
TERM_ORDER_LENGTH_ADD_FOOTAGE	*No documentation this release*
WORK_POINT_BLOCK_LAYER	Name of layer on which Work Points are displayed
WORK_POINT_BLOCK_NAME	Block name used to represent work points in map views.
WORK_POINT_BLOCK_SCALE	Scale at which work point blocks are drawn.
WORK_SPAN_LINE_LAYER	Layer on which work span lines are drawn in map views.

To edit a design parameter type in the system parameter dictionary, select the **SPATIALnet > Dictionaries > Other Definitions > System Parameter Definitions** menu. This action should display the **System Parameter Definitions** dialog box. Highlight the design parameter type to be edited, and click on the **Edit** button as shown below.

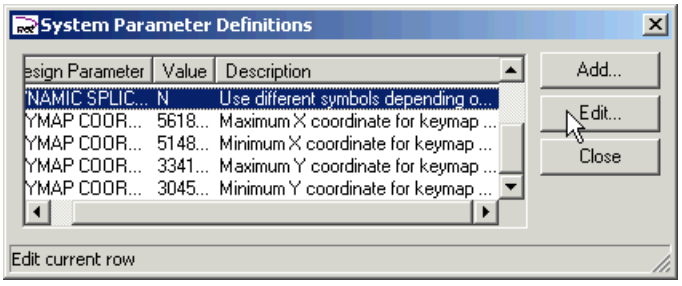


Figure 117 – System Parameter Definitions dialog box

This will display the **Edit System Parameter Definition** dialog box.

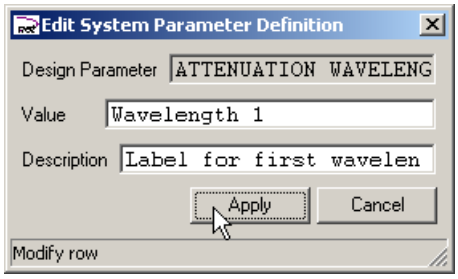


Figure 118 – Edit System Parameter Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified system parameter type should then be visible in the **System Parameter Definitions** dialog box.

Note: As a "Design Parameter" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a system parameter type

System parameter types cannot be deleted. However, the default values can be overridden. See previous section on *Editing a system parameter .*

Creating a support duct type

To configure a support duct type, use the **SPATIALnet > Dictionaries > Support Structure Definitions** command to bring up the menu box, then highlight and click on **Support Duct Type Definitions....** This action displays the **Duct Type Definitions** dialog box.

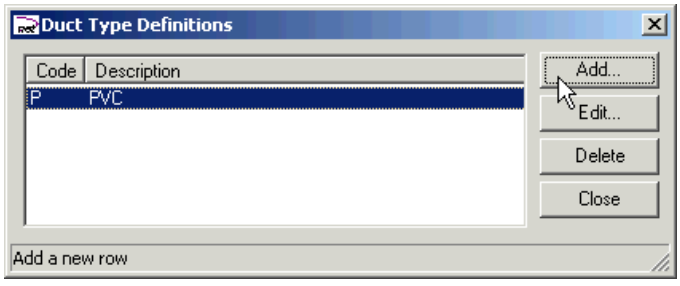


Figure 119 – Duct Type Definitions dialog box

The **Duct Type Definitions** dialog box contains the following fields:

Code:	
Description:	

To add a new duct type, click the **Add** button. The **Add Duct Type Definition** dialog box should now be displayed.

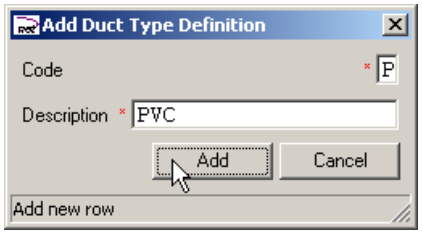


Figure 120 – Add Duct Type Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new duct type should then be visible in the **Duct Type Definitions** dialog box.

Editing a support duct type

Once a duct type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a duct type in the Support Drop Type dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support Duct Type Definitions...** menu. This action should display the **Duct Type Definitions** dialog box. Highlight the duct type to be edited, and click on the **Edit** button as shown below.

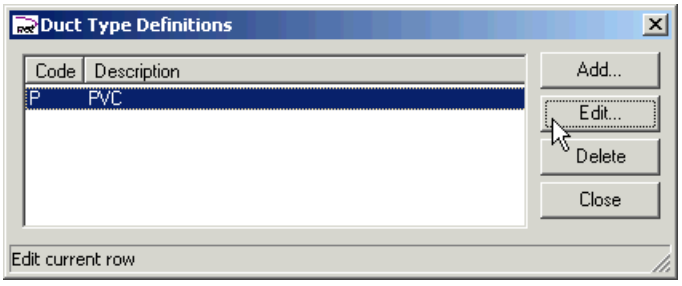


Figure 121 – Duct Type Definitions dialog box

This will display the **Edit Duct Type Definition** dialog box.

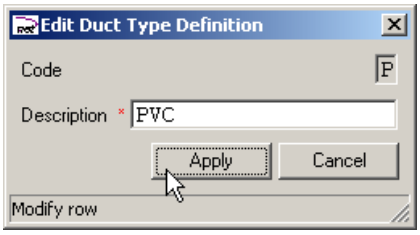


Figure 122 – Edit Duct Type Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified duct type should then be visible in the **Duct Type Definitions** dialog box.

Note: As the Code is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a support duct type

To delete a support duct type from the Support Duct Type dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support Duct Type Definitions...** menu. This action should display the **Duct Type Definitions** dialog box. Highlight the duct type you wish to delete, and click on the **Delete** button. The selected support duct type should now be removed from the **Duct Type Definitions** dialog box.

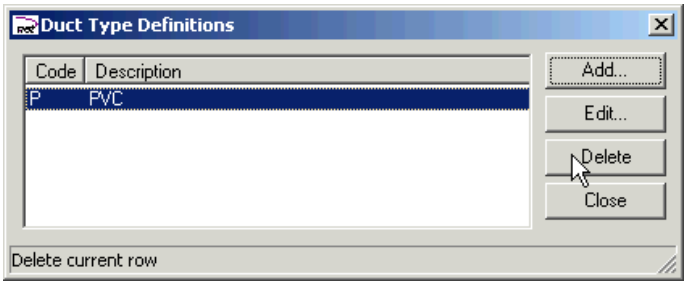


Figure 123 – Deleting from the Support Duct Definitions dialog box

Creating a support duct radius type

To configure a support duct type, use the **SPATIALnet > Dictionaries > Support Structure Definitions** command to bring up the menu box, then highlight and click on **Support Duct Radius Definitions....** This action displays the **Duct Radius Definitions** dialog box.

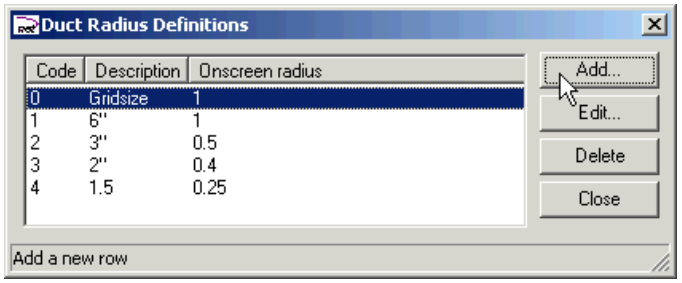


Figure 124 – Duct Radius Definitions dialog box

The **Duct Type Definitions** dialog box contains the following fields:

Code:	
Description:	
Onscreen radius:	

To add a new duct type, click the **Add** button. The **Add Duct Radius Definition** dialog box should now be displayed.

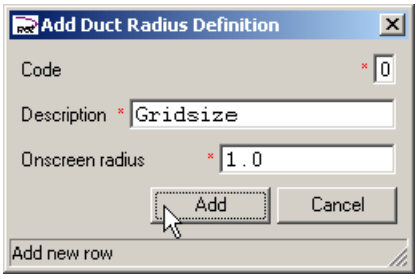


Figure 125 – Add Duct Radius Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new duct radius type should then be visible in the **Duct Radius Definitions** dialog box.

Editing a support duct radius type

Once a duct radius type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a duct radius type in the Support Duct Radius dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support Duct Type Definitions...** menu. This action should display the **Duct Radius Definitions** dialog box.

Highlight the duct radius type to be edited, and click on the **Edit** button as shown below.

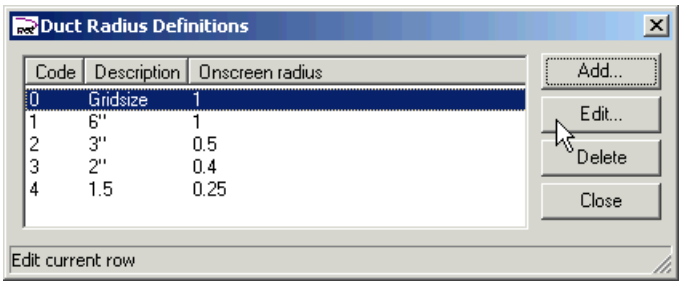


Figure 126 – Duct Radius Definitions dialog box

This will display the **Edit Duct Radius Definition** dialog box.

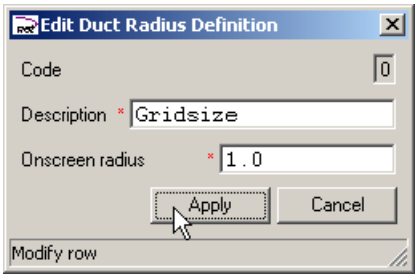


Figure 127 – Edit Duct Radius Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified duct radius type should then be visible in the **Duct Radius Definitions** dialog box.

Note: As the Code is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a support duct radius type

To delete a support duct type from the Support Duct Type dictionary, select the **SPATIALnet > Dictionaries > Support Structure Definitions > Support Duct Radius Definitions...** menu. This action should display the **Duct Radius Definitions** dialog box. Highlight the duct radius type you wish to delete, and click on the **Delete** button. The selected support duct radius type should now be removed from the **Support Duct Radius Definitions** dialog box.

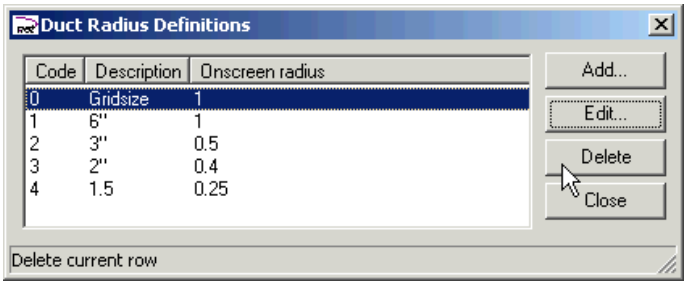


Figure 128 – Deleting from the Duct Radius Definitions dialog box

Chapter 2

Configuring Copper Outside Plant Equipment

This chapter covers the following topics:

- How to manage specifications of equipment and site types, including defining new types of outside plant equipment.
- How to add additional database attributes to a class of equipment.

See Also: ***This chapter does not cover topics related to the management of pairs (usage, splicing, tracing, etc.). See () for sections covering these topics.***

See Also: ***This chapter does not cover topics related to managing plant item records, connectivity, etc. in the database. See () for sections covering this topic.***

See Also: ***This chapter does not cover topics related to configuring inside plant equipment. See () for sections covering this topic.***

About site, equipment and cable types

SPATIAL*net* FM maintains tables, or "dictionaries" of site and equipment types. These dictionaries are necessary for managing the specification of plant and facility records. "Managing" an equipment and site type includes creating, editing, and deleting specifications for equipment types, as well as specifying their display symbology.

Before an item of equipment or a site of a specific type can be entered into the SPATIAL*net* FM database, the specification of that type must first be defined. This is done by creating a new entry in the appropriate dictionary, from the list below:

- Copper In-line Equipment Dictionary (page 118)
- Usage Code Dictionary (page **Error! Bookmark not defined.**)

The remaining outside plant configuration items are documented on the pages below.

- Address Dictionary (page 52)
- Boundary Dictionary (page 86)
- Parcel Dictionary (page 43)
- Road Dictionary (page 52)
- Support Node Housing Dictionary (page 86)
- Support Node Annotation Dictionary (page 43)
- Support Anchor Dictionary (page 52)
- Support LHS Dictionary (page 86)
- Support LHS Annotation Dictionary (page 43)
- Support Drop Dictionary (page 52)
- System Parameter Dictionary (page 86)

Creating a copper cable definition

To create a copper cable type definition, select the **SPATIALnet > Dictionaries > Copper Definitions**, then highlight and click on **Cable Definitions....** This action displays the **Copper Cable Definitions** dialog box.

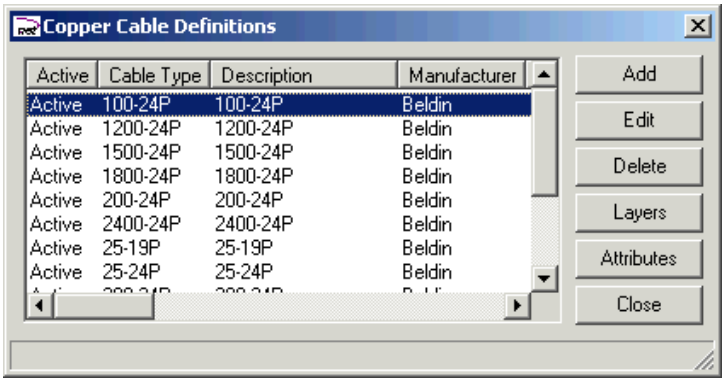


Figure 129 – Copper Cable Definitions dialog box

The **Copper Cable Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected.

	when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Cable Type:	Name for the cable type.
Description:	Description of the cable type.
Manufacturer:	Manufacturer of the cable type.
Total Pairs:	Number of pairs in the cable type.
Wire Gauge:	Wire gauge of the cable type.
Material:	Material of the cable type.
Network Type:	Text description of network type this cable type is used in.
db Loss:	
2B1Q Loss @ 20kHz:	
HDSL Loss @ 192kHz:	
Ohms Resistance (Feeder):	
Ohms Resistance (Distr.):	
Auto create taps:	This field is a pull-down list with the following options: **Manually create taps** A splicable joint will not be created at each segment junction within the cable. This is the state normally used for cables not used in residential distribution. **Auto Tap every segment at creation** A splicable joint will be created at each segment junction within the cable. This is the state normally used for cables used in residential distribution.
Cost:	Cost per unit for this cable type (units are the same as the map units).
Splice Case Type:	Type of splice case to use when splices are automatically created to terminate cables drawn in free space.

To add a new Copper Cable Definition, click the **Add** button. The **Add Cable Definition** dialog box should now be displayed.

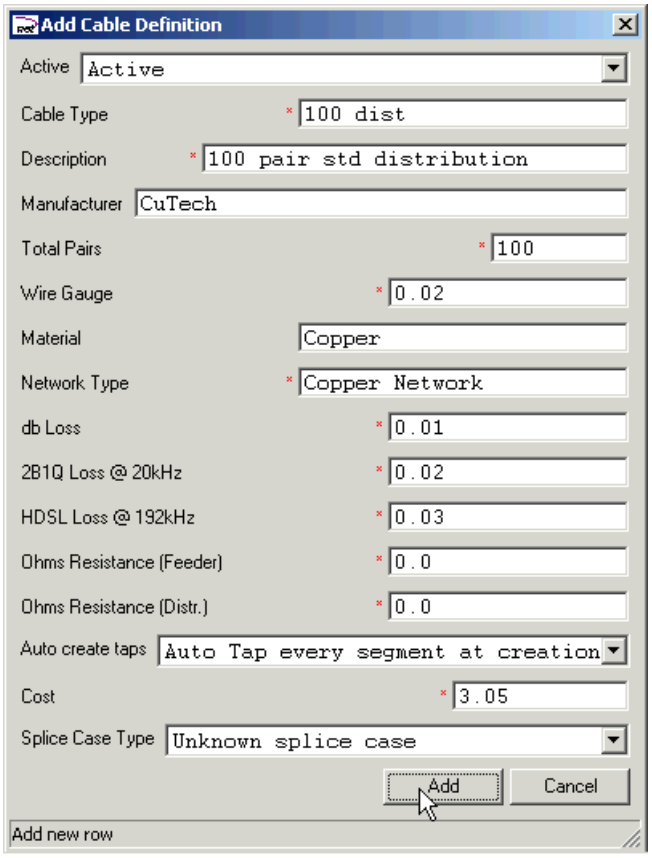


Figure 130 – Add Cable Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new copper cable type should then be visible in the **Copper Cable Definitions** dialog box.

Editing a copper cable definition

Once a copper cable type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a copper cable type in the Copper Cable Definitions dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions > Cable Definitions...** menu. This action should display the **Copper Cable Definitions** dialog box. Highlight the copper cable type to be edited, and click on the **Edit** button as shown below.

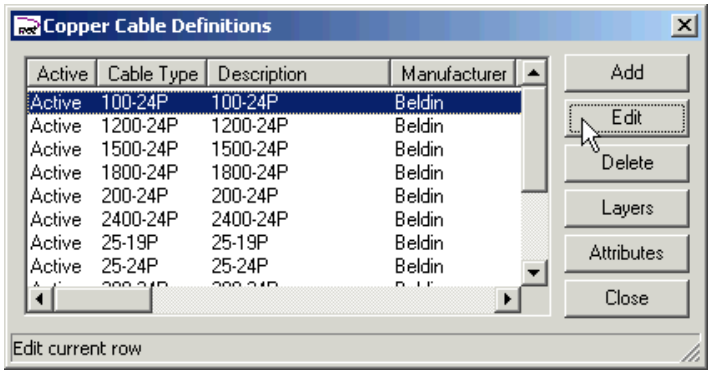


Figure 131 – Copper Cable Definitions dialog box

This will display the **Edit Copper Cable Definition** dialog box.

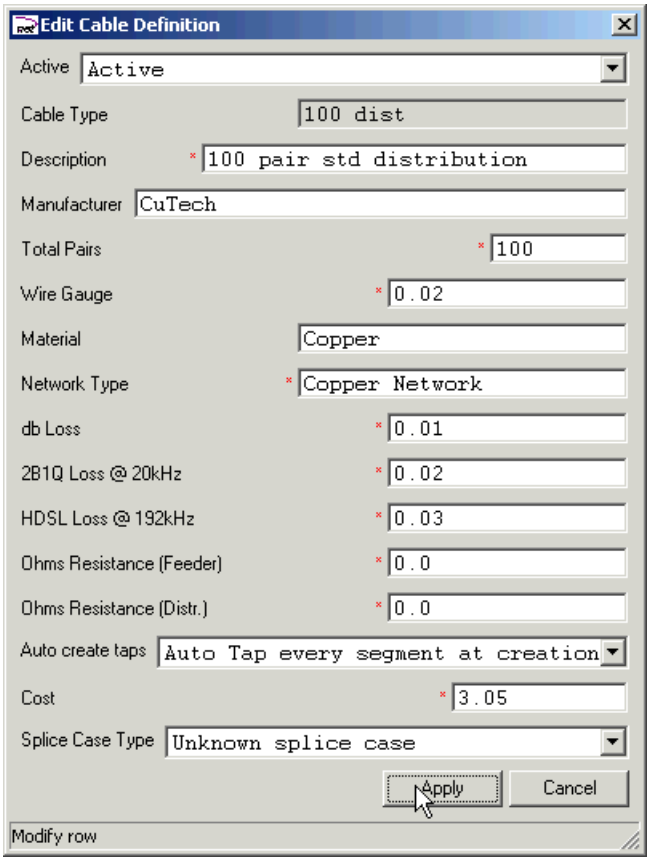


Figure 132 – Edit Copper Cable Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified copper cable type should then be visible in the **Copper Cable Definitions** dialog box.

Note: As a "Cable Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a copper cable definition

To delete a copper cable type from the copper cable dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions > Cable Definitions...** menu. This action should display the **Copper Cable Definitions** dialog box. Highlight the copper cable type you wish to delete, and click on the **Delete** button. The deleted copper cable type should no longer be visible in the **Copper Cable Definitions** dialog box.

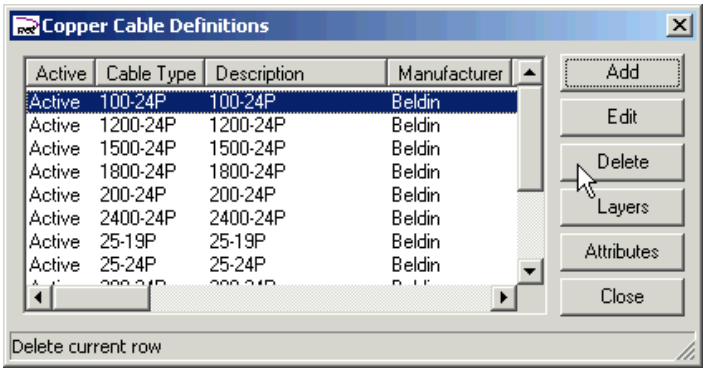


Figure 133 – Deleting a Copper Cable type from the Copper Cable Definitions dialog box

Assigning CAD layers for displaying a copper cable type

To create a cable layer type, use the **SPATIALnet > Dictionaries > Copper Definitions** command to bring up the menu box, highlight and click on **Cable Definitions...** to display the **Copper Cable Definitions** dialog box, then click on the **Layers** button to display the Cable Layer Definitions dialog box.

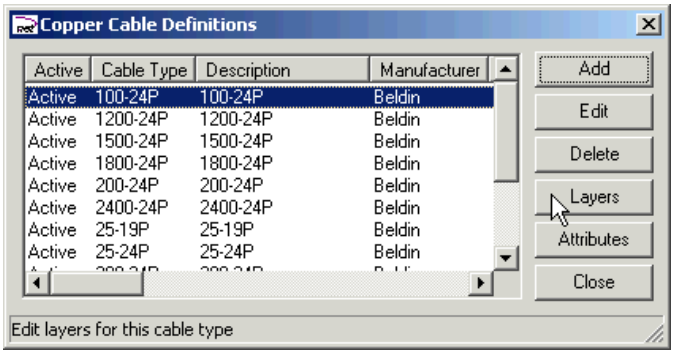


Figure 134 – Creating a Cable Layer Definition from the Copper Cable Definitions dialog box

The **Cable Layer Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Cable Type:	Read-only field displaying the cable type ID for which display layers are being defined.
Construction Type:	Defines the construction type to which the layer definition applies. Select one of the following values from the drop down list: **Aerial, Underground, Pigtail, Other**.
Display Layer:	CAD layer in which the lines representing cables of this type and construction environment will be rendered.
Line Width:	AutoCAD line width used to display cables of this type and construction environment.

Note: If a cable is created with a cable type and construction status for which there the cable layer dictionary entry is Inactive, the system will display the following error message:

> **Layer procedure failed:**
> **npm<layer_graphics: gdm$lov_column: Entry TYPE = *cable type name-construction code* not found in COPPER_CABLE_LAYER_DICT**

Adding the missing layer to the cable layer dictionary and regenerating the view should clear this error.

To add a new cable layer type, click the **Add** button. The **Add Cable Layer Definition** dialog box should now be displayed.

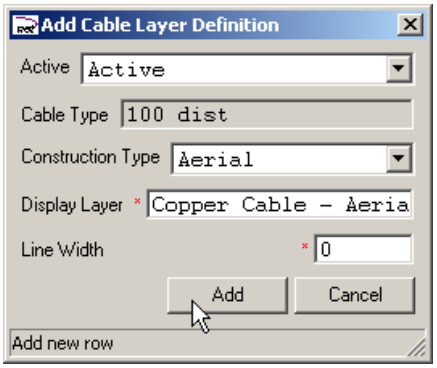


Figure 135 – Add Cable Layer Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new cable type should then be visible in the **Cable Layer Definition** dialog box.

Editing a cable layer type

Once a cable layer type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a cable layer type in the cable layer type dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions** command to bring up the menu box, highlight and click on **Cable Definitions...** to display the **Copper Cable Definitions** dialog box, then click on Layers to display the **Cable Layers Definitions** dialog box. Highlight the cable layer type to be edited, and click on the **Edit** button as shown below.

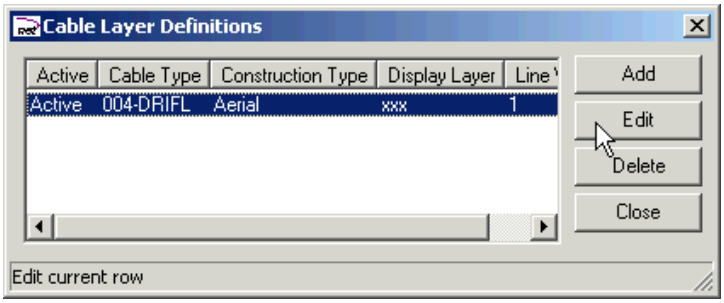


Figure 136 – Cable Layer Definitions dialog box

This will display the **Edit Cable Layer Definition** dialog box.

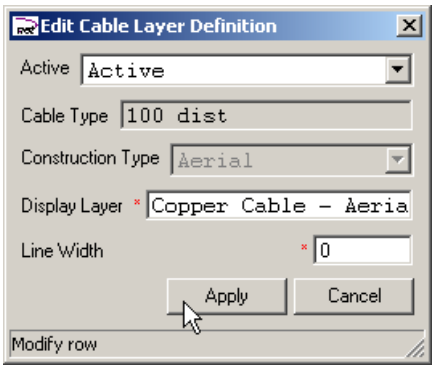


Figure 137 – Edit Cable Layer Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified cable layer type should then be visible in the **Cable Layer Definitions** dialog box.

Note: As "Cable Type" and "Construction Type" are uniquely identifying attributes to which all other fields are connected, it is not possible to edit these fields.

Deleting a cable layer type

To delete a cable layer type from the cable layer dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions > Cable Definitions...** to display the **Copper Cable Definitions** dialog box, then click on **Layers** to display the **Cable Layers Definitions** dialog box. Highlight the cable layer type to be deleted, and click on the **Delete** button as shown below. The deleted cable type should no longer be visible in the **Cable Layer Definitions** dialog box.

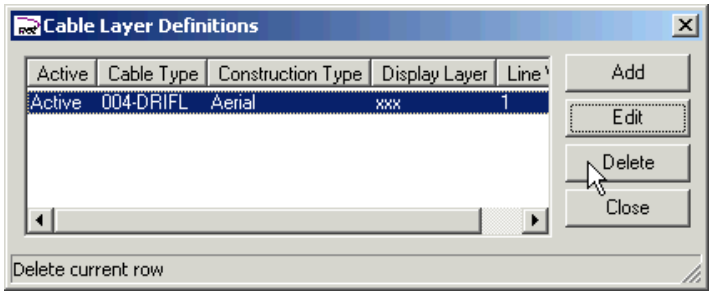


Figure 138 – Deleting a cable layer definition from the Cable Layer Definitions dialog box

Creating a copper splice case definition

To create a copper splice case definition, select the **SPATIALnet > Dictionaries > Copper Definitions**, then highlight and click on **Splice Case Definitions....** This action displays the **Splice Case Definitions** dialog box.

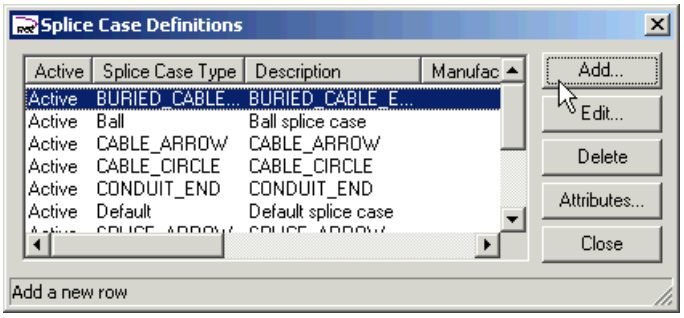


Figure 139- Splice Case Definitions dialog box

The **Splice Case Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Splice Case Type:	Name for splice case type

Description:	Description of splice case type
Manufacturer:	Manufacturer of splice case type
Display Layer:	CAD layer on which splice cases of this type will be displayed
Symbol Name:	CAD block used to display splice cases of this type
Symbol Scale:	Scale factor applied to CAD block when displaying splice cases of this type
Use Cable End Symbol?:	
Cost:	Cost per unit item for this splice case type.

To add a new splice case Definition, click the **Add** button. The **Add Splice Case Definition** dialog box should now be displayed.

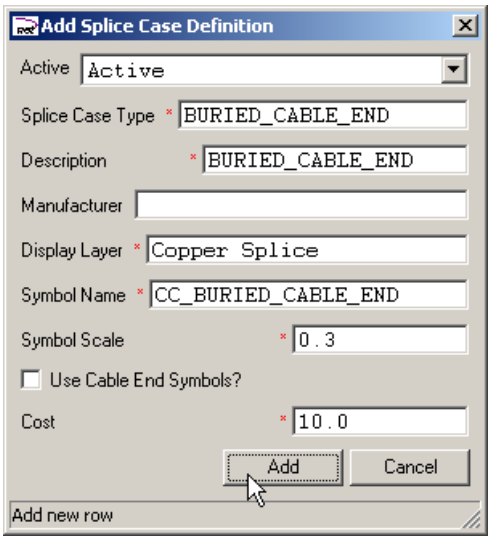


Figure 140 – Add Splice Case Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new splice case type should then be visible in the **Splice Case Definitions** dialog box.

Editing a copper splice case definition

Once a copper splice case type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a copper splice case type in the splice case dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions > Splice Case Definitions...** menu. This action should

display the **Splice Case Definitions** dialog box. Highlight the splice case type to be edited, and click on the **Edit** button as shown below.

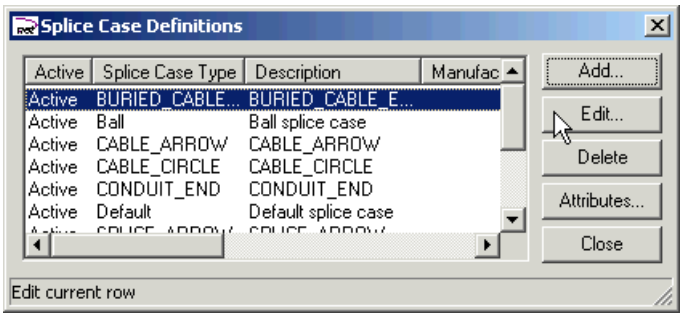


Figure 141 –Splice Case Definition dialog box

This will display the **Edit Splice Case Definition** dialog box.

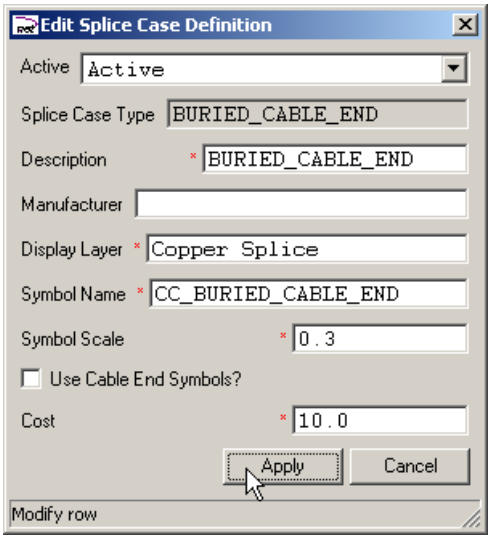


Figure 142 – Edit Copper Cable Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified splice case type should then be visible in the **Splice Case Definitions** dialog box.

Note: As a "Splice Case Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a copper splice case definition

To delete a copper splice case type from the splice case dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions > Splice Case Definitions...** menu. This action should display the **Splice Case Definitions** dialog box. Highlight the splice case

type you wish to delete, and click on the **Delete** button. The deleted splice case type should no longer be visible in the **Splice Case Definitions** dialog box.

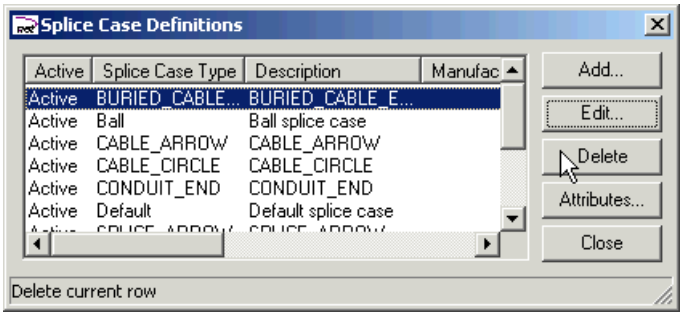


Figure 143 – Deleting a splice case type from the Splice Case Definitions dialog box

Creating a termination block definition

To create a termination block type definition, select the **SPATIALnet > Dictionaries > Copper Definitions**, then highlight and click on **Terminal Block Definitions….** This action displays the **Termination Block Definitions** dialog box.

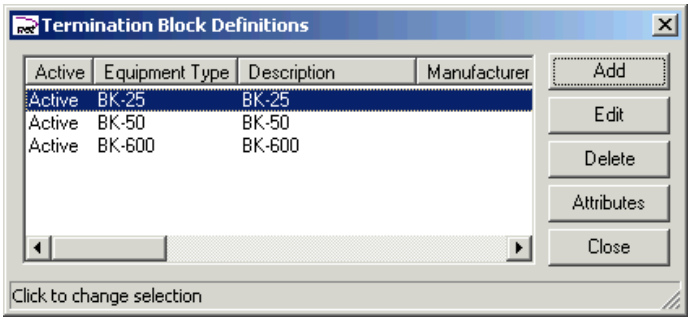


Figure 144 –Termination Block Definitions dialog box

The **Termination Block Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Equipment Type:	Name of this termination block type.
Description:	Description of this termination block type.
Manufacturer:	Manufacturer of this termination block type.
Total Ports:	Total number of ports block contains.
Default Port State	State code automatically applied to pairs connected to

Code:	termination blocks of this type.
Network Type:	Text description of network type this cable type is used in
db loss:	
2B1Q Loss @ 20kHz:	
HDSL Loss @ 192kHz:	
Ohms Resistance (Feeder):	
Ohms Resistance (Distr.):	
Site Type:	Name of the site type from the site dictionary which is automatically created to house the termination block when a new termination block is created in free space.
Cost:	Cost per unit item

To add a new term block Definition, click the **Add** button. The **Add Term Block Definition** dialog box should now be displayed.

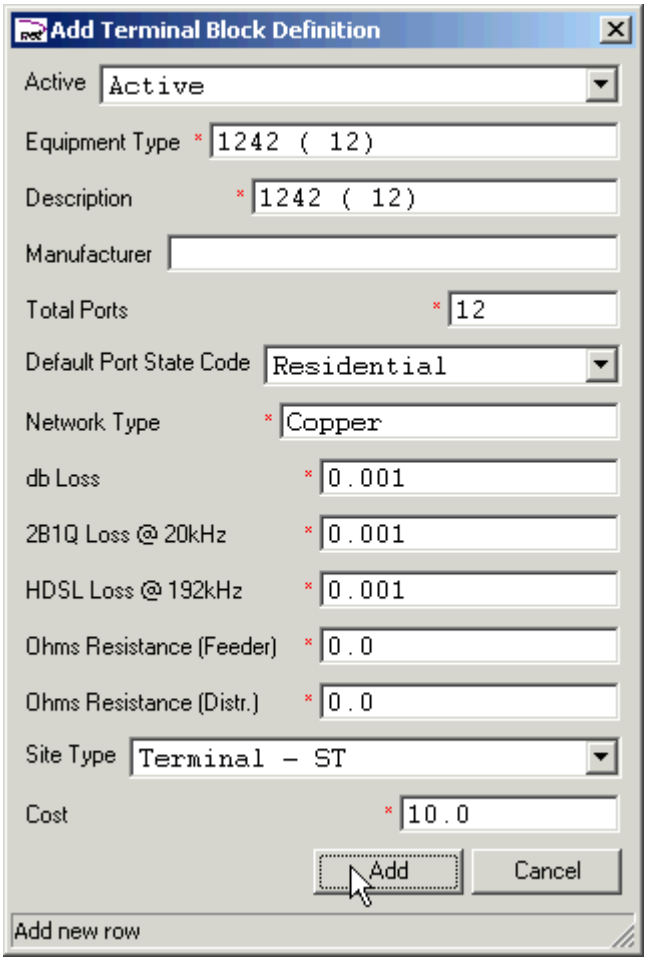


Figure 145 – Add Term Block Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new term block type should then be visible in the **Termination Block Definitions** dialog box.

Editing a termination block definition

Once a termination block type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a termination block type in the termination block definitions dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions > Terminal Block Definitions...** menu. This action should display the **Termination Block Definitions** dialog box. Highlight the term block to be edited, and click on the **Edit** button as shown below.

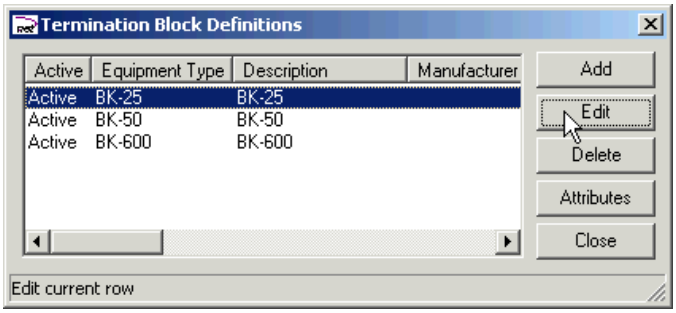


Figure 146 – Termination Block Definitions dialog box

This will display the **Edit Term Block Definition** dialog box.

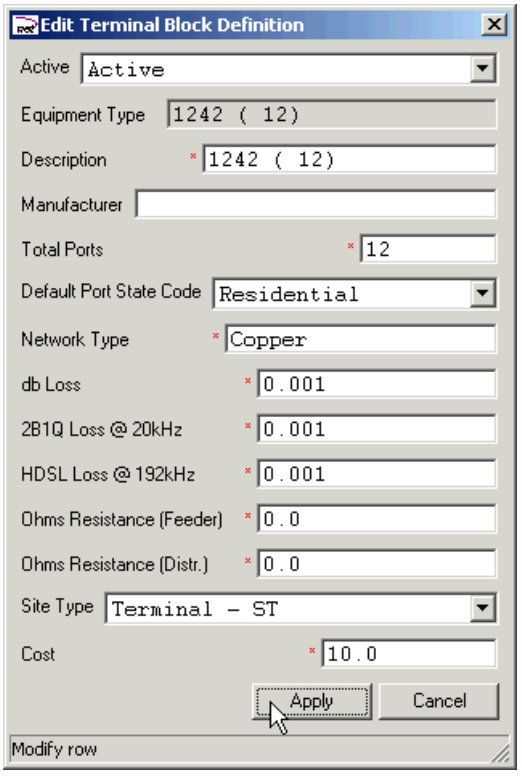


Figure 147 – Edit Term Block Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified term block type should then be visible in the **Termination Block Definitions** dialog box.

Note: As "Equipment Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a termination block definition

To delete a termination block type from the termination block dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions > Terminal Block Definitions...** menu. This action should display the **Termination Block Definitions** dialog box. Highlight the termination block type you wish to delete, and click on the **Delete** button. The deleted termination block type should no longer be visible in the **Termination Block Definitions** dialog box.

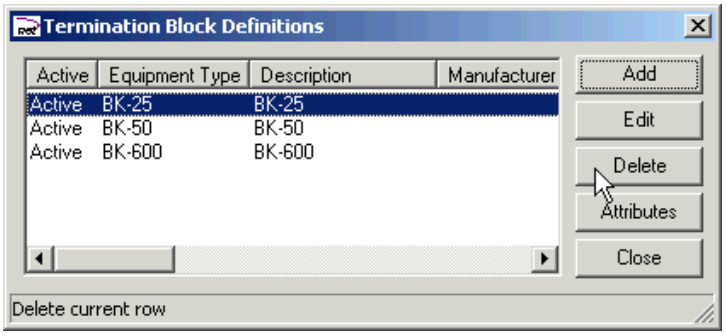


Figure 148 – Deleting a termination block type from the Termination Block Definitions dialog box

Creating a cross connect definition

To create a cross connect type definition, select the **SPATIALnet > Dictionaries > Copper Definitions**, then highlight and click on **Cross Connect Definitions....** This action displays the **Cross Connect Definitions** dialog box.

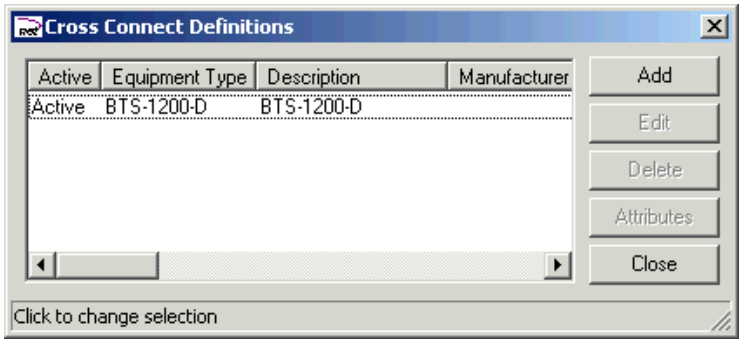


Figure 149 –Cross Connect Definitions dialog box

The **Cross Connect Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive",

	new instances of this type *cannot* be created.
Equipment Type:	Name of this cross connect type
Description:	Description of this cross connect type
Manufacturer:	Manufacturer of this cross connect type
Number of In Block:	Number of termination blocks on the input side of the cross connect
Number of Out Block:	Number of termination blocks on the output side of the cross connect
Total Ports:	
Number of ports (size) of In Block:	
Number of ports (size) of Out Block:	
Default Port State Code:	
Network Type:	Text description of network type this cable type is used in
db Loss:	
2B1Q Loss @ 20kHz:	
HDSL Loss @ 192kHz:	
Ohms Resistance (Feeder):	
Ohms Resistance (Distr.):	
Site Type:	Name of the site type from the site dictionary which is automatically created to house the cross connect when a new cross connect is created in free space.
Cost:	Cost per unit item

To add a new cross connect definition, click the **Add** button. The **Add Cross Connect Definition** dialog box should now be displayed.

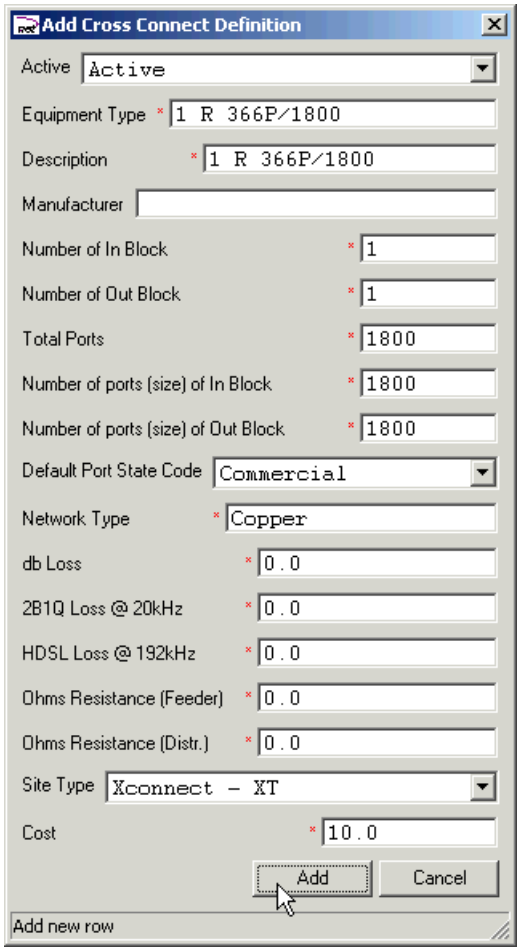


Figure 150 – Add Cross Connect Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new cross connect type should then be visible in the **Cross Connect Definitions** dialog box.

Editing a cross connect definition

Once a cross connect type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit a cross connect type in the cross connect definitions dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions > Cross Connect Definitions...** menu. This action should display the **Cross Connect Definitions** dialog box. Highlight the cross connect type to be edited, and click on the **Edit** button as shown below.

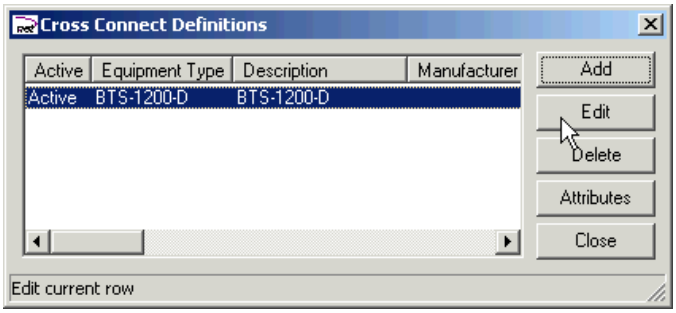


Figure 151 – Cross Connect Definitions dialog box

This will display the **Edit Cross Connect Definition** dialog box.

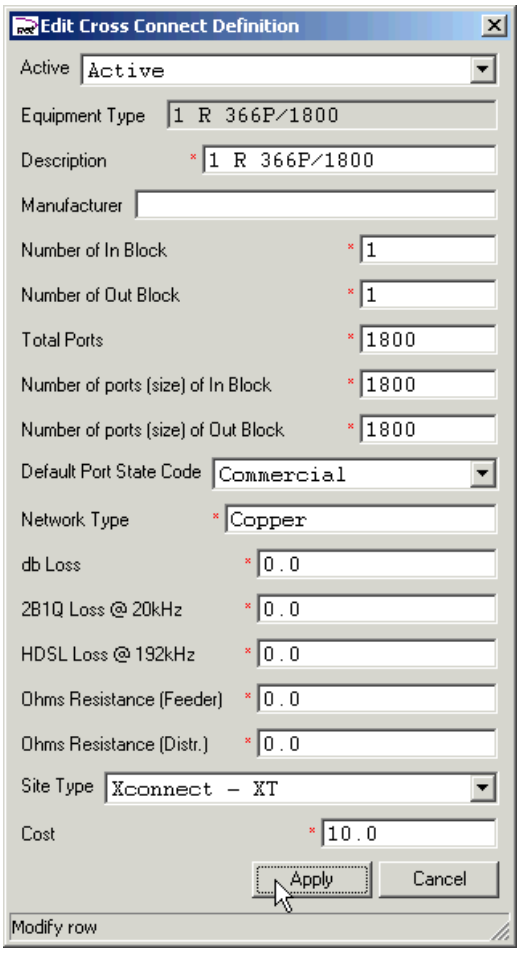


Figure 152 – Edit Cross Connect Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified cross connect type should then be visible in the **Cross Connect Definitions** dialog box.

Note: As "Equipment Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting a cross connect definition

To delete a cross connect type from the cross connect dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions > Cross Connect Definitions...** menu. This action should display the **Cross Connect Definitions** dialog box. Highlight the cross connect type you wish to delete, and click on the **Delete** button. The deleted cross connect type should no longer be visible in the **Cross Connect Definitions** dialog box.

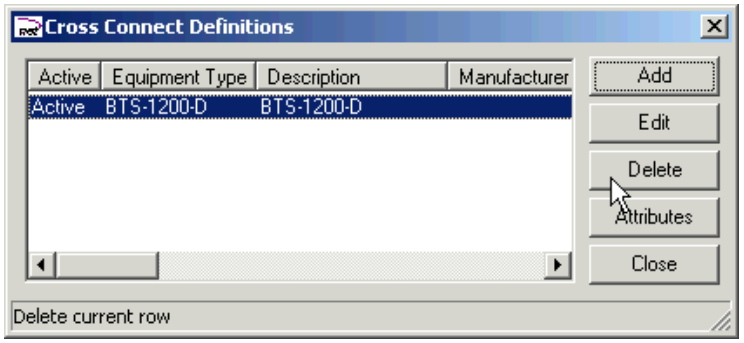


Figure 153 – Deleting a cross connect type from the Cross Connect Definitions dialog box

Creating an in-line equipment definition

To create an in-line equipment definition, select the **SPATIALnet > Dictionaries > Copper Definitions**, then highlight and click on **In-Line Equipment Definitions....** This action displays the **In-Line Equipment Definitions** dialog box.

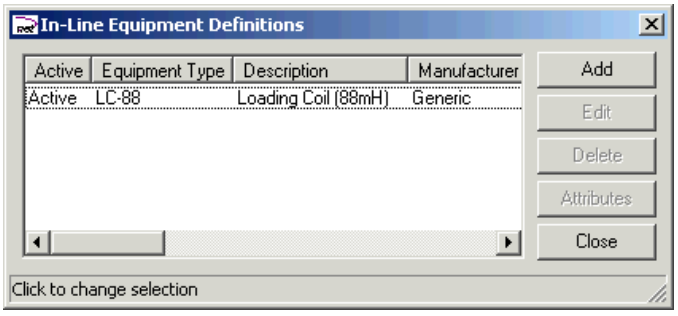


Figure 154 – In-Line Equipment Definitions dialog box

The **In-Line Equipment Definitions** dialog box contains the following fields:

Active:	If the type is "active" it means that the item can be selected when creating new instances of this type. If it is "inactive", new instances of this type *cannot* be created.
Equipment Type:	Name of this equipment type
Description:	Description of this equipment type
Manufacturer:	Manufacturer of this equipment type
Total Pairs:	Total number of pairs which can be connected to this type of equipment.
Default Pair State Code:	State code automatically applied to pairs connected to termination blocks of this type
Network Type:	Text description of network type this cable type is used in
db Loss:	
2B1Q Loss @ 20kHz:	
HDSL Loss @ 192kHz:	
Ohms Resistance (Feeder):	
Ohms Resistance (Distr.):	
Site Type:	Name of the site type from the site dictionary which is automatically created to house the equipment when a new instance of the equipment is created in free space.
Cost:	Cost per unit item

To add a new in-line equipment definition, click the **Add** button. The **Add In-Line Equipment Definition** dialog box should now be displayed.

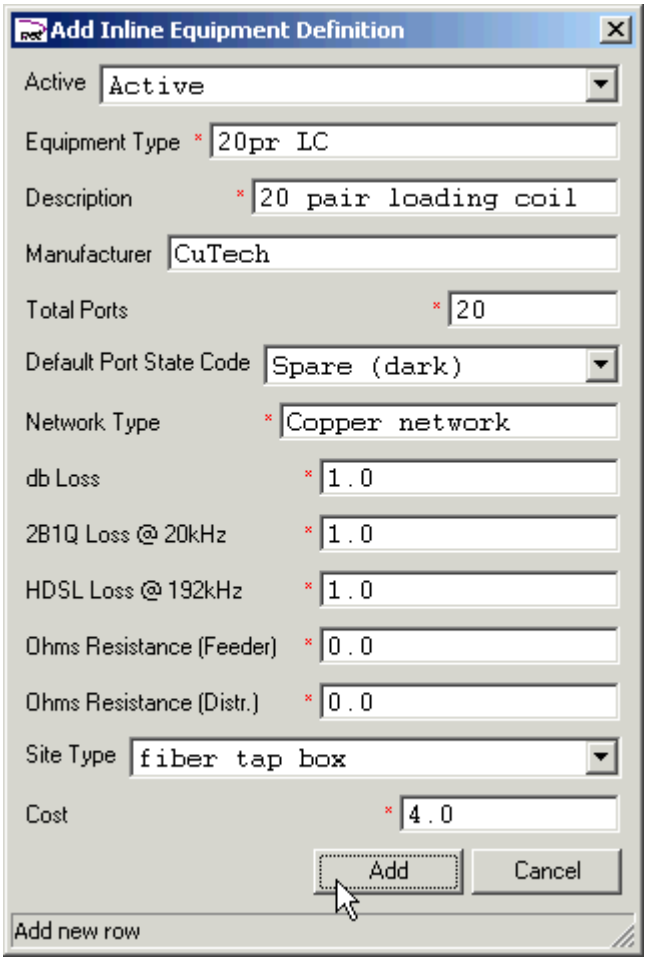


Figure 155 – Add In-line Equipment Definition dialog box

Note: The red asterisk indicates that the field is mandatory.

Enter the appropriate data, then click the **Add** button. The new in-line equipment type should then be visible in the **In-Line Equipment Definitions** dialog box.

Editing an in-line equipment definition

Once an in-line equipment type has been created, it is possible to edit or modify the information in the fields connected with the type.

To edit an in-line equipment type in the in-line equipment definitions dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions > In-Line Equipment Definitions...** menu. This action should display the **In-Line Equipment Definitions** dialog box. Highlight the in-line equipment type to be edited, and click on the **Edit** button as shown below.

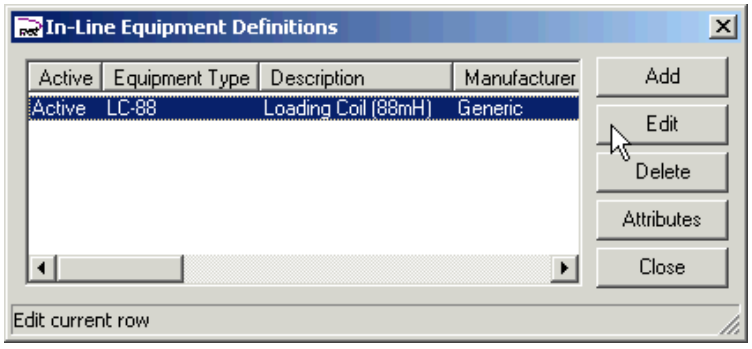


Figure 156 – In-Line Equipment Definitions dialog box

This will display the **Edit In-Line Equipment Definition** dialog box.

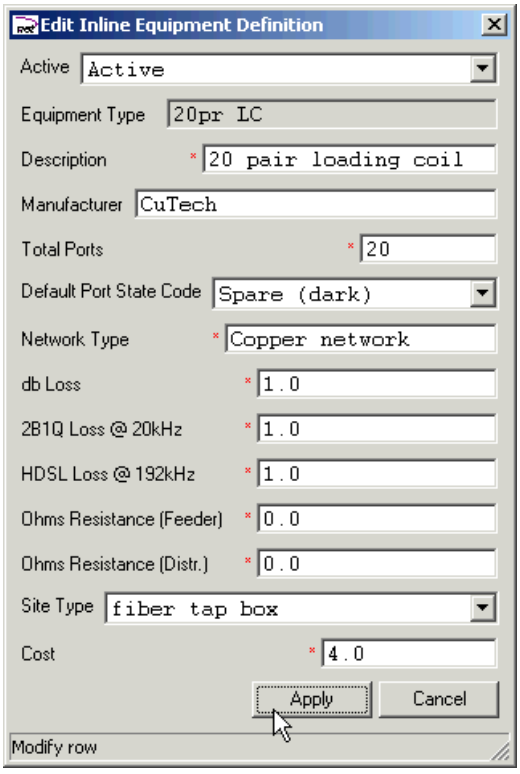


Figure 157 – Edit In-Line Equipment Definition dialog box

Modify the data as appropriate, then click the **Apply** button. The modified cross connect type should then be visible in the **In-Line Equipment Definitions** dialog box.

Note: As "Equipment Type" is a uniquely identifying attribute to which all other fields are connected, it is not possible to edit this field.

Deleting an in-line equipment definition

To delete an in-line equipment type from the in-line equipment dictionary, select the **SPATIALnet > Dictionaries > Copper Definitions > In-Line Equipment Definitions...** menu. This action should display the **In-Line Equipment Definitions** dialog box. Highlight the in-line equipment type you wish to delete, and click on the **Delete** button. The deleted in-line equipment type should no longer be visible in the **In-Line Equipment Definitions** dialog box.

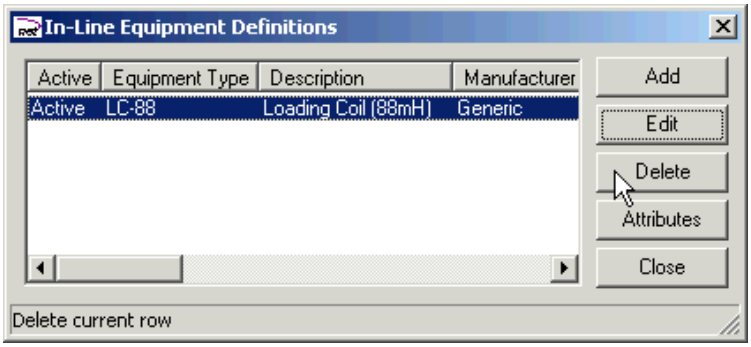


Figure 158 – Deleting an in-line equipment type from the In-Line Equipment Definitions dialog box

Adding custom attributes to a dictionary definition

SPATIAL*net* allows for the adding of custom attributes. To add custom attributes to any type of definition:

1. Display the definition of the type of entity to which you wish to add custom attributes, and then click the **Attributes** displayed on the panel. This action displays the **Attribute Mapping** menu box.

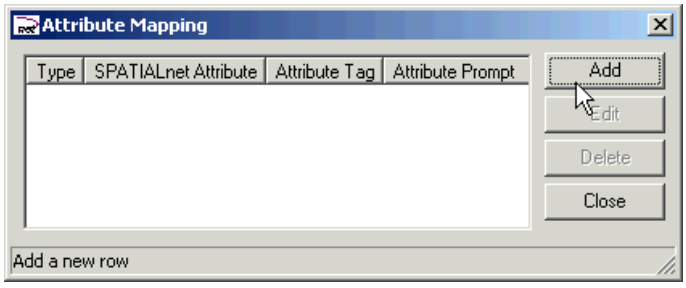


Figure 159 – Attribute Mapping dialog box

The **Attribute Mapping** menu box contains the following fields:

Type:	This field lists the type code you have selected. You cannot edit this field.
SPATIAL*net* Attribute:	Using the drop-down menu, select the logical column name in which data for this attribute will be stored.
Attribute Tag:	AutoCAD attribute tag for displaying this symbol.
Attribute Prompt:	This is the text which will appear on all SPATIAL*net* panels in reference to this attribute. This field is grayed if the attribute already displays a field in the existing SPATIALnet panel.

Note: The underlined fields are mandatory:

2. To add new custom attributes click the **Add** button. The **Attribute Mapping** dialog box should now be displayed.

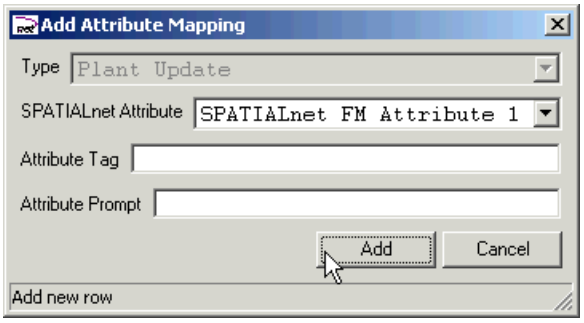


Figure 160 – Add Attribute Mapping dialog box

3. Enter the appropriate data, then click the **Add** button. The customized attributes should then be visible in the **Attribute Mapping** dialog box.

Editing attributes in a type definition

To edit custom attributes in any type definition:

1. Display the definition of the type of entity to which you wish to add custom attributes, and then click the **Attributes** displayed on the panel. This action displays the **Attribute Mapping** menu box.
2. Select the type you wish to edit, and then click the **Edit** button. This action displays the **Edit Attribute Mapping** dialog box.
3. Edit the appropriate fields, then click **Apply**.

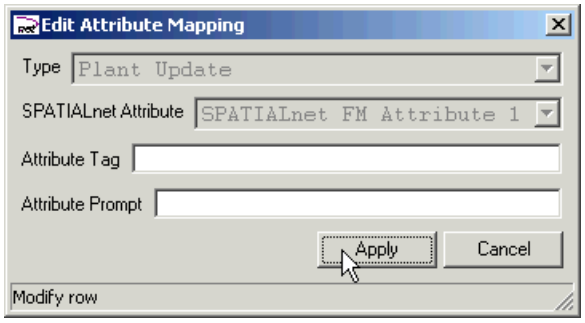


Figure 161 – Attribute Mapping dialog box

Deleting attributes from a type definition

To delete custom attributes in any type definition:

1. Display the definition of the type of entity to which you wish to add custom attributes, and then click the **Attributes** displayed on the panel. This action displays the **Attribute Mapping** menu box.

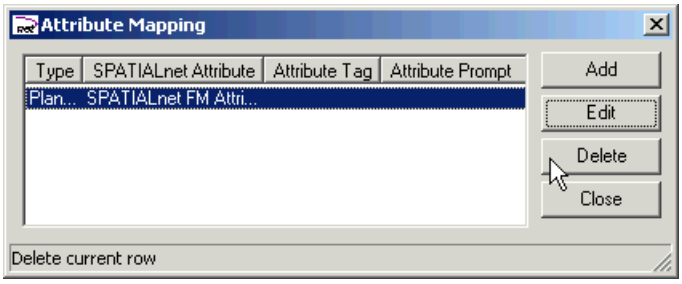


Figure 162 – Attribute Mapping dialog box

2. Click on the **Delete** button. The custom attributes should no longer be visible in the **Attribute Mapping** dialog box.

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